The following transcription taken from videotapes converted to cassette tapes of interviews with retired Fish and Wildlife Service pilots and aircraft mechanics. Video interview made January 2000, in Anchorage, Alaska as part of the annual pilots training. (Transcription of cassette tapes by Mary E. Smith, 4120 Dorothy Drive, Anchorage, Alaska, March 2002.)

John Sarvis

Welcome to all of you. We are going to try and record this so please pass the mike around when you and/or the next person speak. Let's start with Jerry Lawhorn. Why don't you tell us what your role was and what you did.

Jerry Lawhorn

Thanks. I wrote a few notes here and they are not in any sequence. You will just have to bear with me. It says here that I started with the Fish and Wildlife Aircraft Division in 1956. I came on board from Alaska Airlines. I was their Bush Maintenance Foreman then. It gave me a good back ground because they had 30+ airplanes and I specialized in non-standard airplanes. They had one of everything that was ever built I believe. From the Douglas Dolphin to the tri-motor Stinsons, the Bellanca's, the Sky Rocket's, Pace Maker's, Travel Air, Norseman, AG-19's, and a little bit of everything.

When they got out of the business of Bush airplane flying, it left me kind of afoot so they wanted me to go with the main line and be the maintenance

foreman over there. I told them that I had just as soon walk down the street and see if I couldn't get a job. So, I wandered down the street and sure enough, Tom Wardleigh and Theron Smith hired me, along with one of my mechanics. I stayed through the whole smear. It was kind of rough and tumbly first off because we weren't a State yet; still a Territory and everything was kind of rough around the edges.

We gradually became the facility that all the operators looked up to for a change. We were always called the Fish and Wildlife Service or the Federal Government. It wasn't, what they call now, the Feds. They showed a lot of respect for us and it was a place that all the mechanics would like to go to work because of the quality of the maintenance and the people. There weren't too many local folks running around then either.

We were, as Theron will explain, an unfunded division of the Fish and Wildlife. We all realized that we were leaches. All the various branches had to divvy up some of their money to support us. We were a necessary evil. We had the means for them to get around the country. Theron had to be quite a talker to make sure everyone divvied up enough for us leaches to

do our job. We became quite a "can do" organization. There was nothing that

anybody suggested to us that we couldn't try to do one way or the other. If there was a better way to go about that we would sure give it a go.

Tom Wardleigh was second in command there and Theron was the main boss. He was the supervisor. It wasn't too long after I got there that Tom Wardleigh saw that there wasn't really any way for him to go up unless Theron dropped dead somewhere along the line. He decided to transfer over to the Federal Aviation Administration (FAA) for a little better look at his economic future.

That left me kind of filling Tom's slot. Theron was such a great boss that he did all the work in dredging up the money for me to play with! He was a boss that pointed me and then stepped back out of the way. You couldn't beat a boss like that especially when he gave you funds to work with. He would have to get me back in line some times because I would tend to get a little carried away on some of my projects.

We established a lot of precedence through the aircraft division. Other operators would, once in awhile, if they had a problem with an airplane, come over and see if we could solve the problem. We established a lot of modifications to the standard to fit in with their operation. They built these darn things in Kansas and Pennsylvania and they are made for concrete runways and training airplanes and that sort of thing. They didn't fit very well with our rough and tumble backwoods business. We constantly were modifying things.

We had a maintenance turnover of maybe losing a mechanic every year or two and by and large those folks that went away, they went with the FAA and became general aviation maintenance inspectors. We produced quite a few of FAA folks from our maintenance facility.

We depended a lot on the military surplus airplanes and parts. We had the Grumman Goose which was all surplus and we ended up with a train carload of spare parts for them. We also absconded with 33 R9-85 engines that were freshly overhauled by the military. We had free engines that the taxpayers had already paid for. All we had to do was pay for the freight to get them up here. We had free airplanes, free parts and free engines. All we had to do

was provide gas. They made a real good Bush plane for us to supply our camps. We hauled out boats and motors, etc., to the camps.

We established all kinds of modifications. Tom Wardleigh and I, essentially, started the big tires on modern airplanes in Alaska. The military, years ago, right after WWII, decided that the L-19's and all their liaison airplanes, the off-airport airplanes, needed tandem landing gears. I don't know how many of you here today know what a tandem landing gear is but it is one wheel ahead of the other wheel with the original gear axle in-between. That let both gears articulate.

We absconded with a few sets of those and bought a few sets. That made all the operators want them too. They were great to an extent in that if you are on gravel or dirt you could turn the airplane quite readily. If you were on hard surface, which was not likely then, it would take a city block to turn the darn things around. You were trying to scrub one wheel against the other and they only had brakes on the rear wheel and they were better than nothing but we were constantly gusseting from landing gear legs because of the twisting motion. They weren't built to be twisted like that. The gear would crack.

We ended up with some Curtis Robbin tires. They were 25x11x4. The Cub tires and wheels were 800x4. Those folks measured 4 inches different! The Curtis Robbin tire is about 5 inches inside, not 4. I don't know who built their measuring sticks but after repairing some of these landing gears and fighting that battle, I asked Tom if he thought that Wes Landis could build us some adapters where we could adapt one 4" tire to a 4" wheel. He allowed as by golly, he would go and see.

Well, it wasn't long until the government airplanes came out with big tires. The operators, seeing all this that the government people were doing, thought this to be the greatest, latest thing so sure enough, everybody started using big tires in Alaska. I don't know if Tom and I are responsible for that or not but we sure were around the hangar.

We had a radio communications system. Everybody knew where everybody was at all times. We had a lot of field stations and there was a fellow who went to McGrath for the summer. He used to come over to my place and drink home brew. He thought that was pretty good stuff. He was going to be based over in McGrath for three months. One evening he called me up on the radio (had one at my house) and wanted to know what all the

consistencies were for the home brew. I started out telling him all the stuff and as it turned out, every field station in Alaska had a comment as to what kind of bottles to use, you name it, from Tok to Dillingham, from Kotzebue to a Research vessel in Juneau! This tells you two things – our communications system was better than you can imagine and every body liked to drink beer! With that, I'd like to turn this microphone over to someone else for awhile.

Jim Branson

Hello. I went to work for the Fish and Wildlife Service in Southeast as a boat operator/enforcement officer in 1949. The first permanent job that I could get with the outfit was in Anchorage in 1951. I moved here to Anchorage and soloed in 1952. I was then shipped over to Kodiak. That kind of cut into my flight training. I got back to Kenai in 1955 and finally got enough time. As I recall, it was 100 hours for a private license in those days. I got checked out in government airplanes, worked through Statehood and in 1963 finally got tired of Holger Larsen? and switched back to the National Marine Fisheries Service and spent the next 13 years in Kodiak working as an enforcement officer. I retired from them in 1976 and then spent the last 12 years of my career with the North Pacific Fisheries Management Council.

I am really a pretty low time pilot. I have a little over 2000 hours and never had anything but a single engine private license. I flew Cubs, Pacers, 180's, 170's and a couple things that Lawhorn put together. One called a sub-Cub. I recall it as a 115 Pacer fuselage with a 150 in it and Super Cub wings. It was a pretty good airplane until the waterfowl biologists busted it up.

That's about it. I think someone pointed out earlier here that those were really grand times. I know in 1963, Ray Tremblay and I and others here would sit around and talk about the good old days but you guys here this morning reminded me how nice it is to be retired (laughter and clapping).

Richard Hensel:

I started out in the mid 1950's and more or less bounced along the first few years as a seasonal em[ployee, mostly with River Basin Studies, until I was assigned full time to Kodiak as an Assistant Refuge Manager. Shortly thereafter, I checked out and became qualified to operate a government Supercub. I flew for a total of about 8 years and spent much time trying to line p the black ball along two dark lines; my friends called me "Yaw." I also flew some in the Yukon-Kuskokwim Delta region after having transferred in 1970 to Anchorage. I too am basically a low time pilot and owe much to Theron Smith. Thank you, Theron, for helping me survive for you're the guy who gave 100% when giving check rides to ensure I and others like me made landings with their skin intact.

I might conclude these opening remarks by saying that in the summer of 1956, as I walked around the hull of a Goose parked by the Lake Hood

hangar, I overheard some sputtering sounds coming from the cockpit window. I hollered an hello upward and from the window pops a little 9 year-old boy who had been making playful sounds of a running engine---that was this guy right here today, Terry Smith.

Terry Smith

I started with the Fish and Wildlife Service in 1949. I was two years old! Dad took a job with the Fish and Wildlife Aircraft Division as the Aircraft Supervisor. No one knew quite what that was. I have a number of letters that he sent just recently that talk about he and Clarence Rhode trying to define what the job might entail and trying to sort out the Aircraft Division in total. I was raised in the Fish and Wildlife hangar. We figured roughly close to 5,000 hours of government airplanes before I left to go to college. I was able to benefit probably more than any other single pilot from all the adages, advice and subtleties that Dad had to offer.

Dad retired in 1973 and Gordon Watson needed someone to fly the turbine-Goose. I had been spending my entire life trying to get to a point to go to work for Fish and Wildlife and fly the Grumman. I flew the Grumman all

through 1973 and 1974 and came back from South America with N-780 as an OAS (Office of Aircraft Services) pilot.

It had happened while we were gone. It was a relationship that was basically not to be because with the initial interview process I had not worked for OAS. Their philosophy was that anything that you did with the Grumman Goose could be done with a big helicopter. That was the beginning of the end of our relationship.

I went on to do other things in aviation. As a "free" employee of the Fish and Wildlife Service from ages 2 through 22 and as a "true" employee were probably the best years that I have ever had. The operation as it grew during the territorial years with Jerry and Tom and Dad running the Aircraft Division, I can truly tell you that even at home, the conversations were all around getting the job done. The Bureau of Commercial Fisheries, Sport Fisheries, Game Management, or Waterfowl would come up with a problem. The problem would be "we need to do this." The conversation around our house, even at the dinner table, was "man, this is going to be interesting" and between Tom, Jerry, Dad, and the whole group out there at the hangar, the

Aircraft Division for the Fish and Wildlife Service was truly dedicated to the Bureau.

There never was any money. That was always the other part of the discussions on a general basis. The 180 showed up and it wouldn't go on any of the floats that were in the fleet. The 3430's (capacity of this plane, JL note) were available because they would go on the Cessna 195 that the Air Force used for search and rescue. Consequently, all of you have probably seen pictures of the only installation of 3430's on the 180's for the U.S. Fish and Wildlife Service in Alaska.

Jerry stuck the airplane on there in the proper fashion. A number of times on Lake Hood, when the only airplane that would be out on the Lake for a several hour period with the southeast wind blowing about 25 was a Fish and Wildlife 180 on 3430's with wide spreader bars and an airplane squatted down between the floats.

It was truly a magical period in aviation history in Alaska because the innovation creativity and the attitude that the job was what was important. There wasn't anything else. The job needed to get done safely and

efficiently. There wasn't any money, so it always had to be done efficiently. One of the people who benefited and added to that was Ray Tremblay.

Ray Tremblay

I started in early 1951 (1953 JL note) as an enforcement agent/pilot. I spent my early career in Fairbanks; in 1956, moved to McGrath. I was in charge of the McGrath district for 5 years then moved back to Fairbanks for 2 more years then to Anchorage for the rest of my career. I retired in 1978 and took over as aircraft supervisor for the Department of Public Safety. I spent 5 years there.

In listening to the stories here today, they all seem to be focusing on the gentleman to my left here (Theron Smith) who was the first Fish and Wildlife Service pilot. Everything that we did and all of our skills were because of his tutelage and his patience and his willingness to spend whatever time it took to get us off of dead center and into becoming a functioning pilot.

I can remember several of my earlier check rides when this little kid would come along and sit in the back seat and he knew more than I did! He would

be pointing out some of the mistakes that I would make and I really didn't like that very much!

Listening to you talking today, I don't know whether you really want to hear what we did. There was a pile of stuff that had to be flown from here to there and if it fit in the airplane, you threw it in and you flew. We never thought too much about weight and balance. We knew about it but it was a job that had to be done and that is what we did. We put it in the airplane and we would fly. If we couldn't get off, then it was the airplane's fault. That doesn't work today. When I was chief pilot for the Department of Public Safety I rammed that home a lot with my pilots over there.

With that and with the understanding that we will probably have some other things to say later, I will turn the mike over to my mentor here. I think the key to any successful pilot in this kind of a business is to have the right mentor, the kind that has been there, to work with and learn from his mistakes.

This gentleman on my left (Theron Smith) is probably the pilot in Alaska that knows more about all of the aspects of our flying than anyone else. He is here today, he is alive to talk about flying!

Theron, you will have to forgive me for telling this one. Talking about having to get the job done and talking about trying to get money, well what Theron did was he flew for other agencies to make money to keep the Fish and Wildlife Service Aircraft section going. I think it was the Park Service that had two Jon boats, two people, and a bunch of freight to fly over the Alaska Range to some lake. This was going to be done in a standard Beaver on amphibian floats. Jerry lashed two Jon boats on the struts and Theron took off in it and it flew! We didn't even know if it was going to fly. Then, after he found out it would fly, he then came back and loaded it up with gas, all tanks.

He then loaded the people, all their freight, went down and took off on the west runway at International, went roaring down the runway, finally got it off and settled into Cook Inlet. He taxied around and the passengers had to get out and walk through the mud to get back to the airport because he couldn't get back off again. Finally, he took off and I think by the time he

got to Kenai, he was able to get airborne and get back to the runway. This is the kind of a guy that Theron was.

What you all want to do here is listen to these stories but don't try to apply these experiences to your own flying because in this day and age, you will not get away with it! Theron, here you are.

Theron Smith

That was quite a job. If I flew the plane with one boat, it worked fine, if I put two boats on, it didn't work worth a damn.

I was born here in Anchorage. My dad was working for the railroad. We left Anchorage and went to Palmer and we lived there many years.

The Nation decided that maybe more pilots were needed in the Navy so they started on the rest of the states and they finally came to Anchorage and they had about 25 people in Anchorage who could be trained as pilots. They had a paper where you wrote down what you did and then they decided who was going to learn or not. Of course, I had to drive from Palmer down to Anchorage.

The road was pretty new then. I would go from Palmer to Anchorage about three times a week and go to teach at the school on paper you know. I found out that there was about two months, I guess, and then they decided who was going to pass and who was not. Well, I passed. There were about 5 of us that made it. I was working for the road commission up on the mountain over there. I was a pretty good mechanic then because my dad taught me. I would go to Anchorage and fly an hour after work. That went on for about 2-1/2 months. I finally passed. I think I had about 55 hours at that time and then you got a certificate. I was still working on the railroad.

The military started building in Alaska. I was working at the time over at McGrath. I came to Anchorage and was flying to get my time up and the war started. I enlisted. I learned to wash the dishes. I was wondering what was going to happen after washing the dishes. I decided I was going to get the hell out of there.

I found a guy that said they needed more people to be pilots. I learned to teach those people and that went on for about a year and half. Then they printed a thing that said that even if you didn't have 2 years of pilot training or school that they would be pilots. Of course, I was already a pilot so I had

to print out two papers what I had done and they then sent me down to Seattle. Finally, I became a pilot.

They didn't tell us where we were going and in the middle of the night they called us up to get on the airplane. They gave us an envelope and told us to carry it with us and told us that after we get into the air, then open up the envelope and see where we were going. We had been there for a whole day working and then we spent most of the night getting more stuff for the airplane, food and all sorts of things. I think it was about 11:00 in the morning.

I put most of the people asleep and I had a navigator up in the bow and had the engineer sitting on the right side and away we went. Pretty soon I thought the engineer was asleep. The next thing I knew, I had flown almost 4 hours, all of us asleep! The navigator came out of the bow and came up and here we were. His eyes were big and he was scared as hell! He was about ready to jump out.

I looked immediately to find out what the altitude was and where we were going. It seemed like we were going pretty good. I told him to go on down

in the bow and start checking where we were and I would check on my side. We finally determined that we were only about 40 miles south of where we should be. There were a whole bunch of airplanes going out but I never saw one of them anyway. (laughter) We were supposed to check in every hour and I told the guy on the radio to call and just tell them that we couldn't make contact with anyone.

I was there for 6 months then the War ended. They hauled that same old airplane back to the states. I went down to Florida and stayed there 'til the War ended. I learned quite a bit. I could run the airplane pretty well. As soon as the War ended, I had quite a time deciding whether I was going to stay in or get out. I finally decided to get out.

I bought a twin engine Cessna and overhauled it. It went along pretty well. I was going to fly independent but the Nation was changing quite a lot. Most of the airplanes available were busted and wouldn't fly. I contacted Ray Peterson and he wanted me to fly for him so I did. I went to Bethel. I was working lots of hours, 7 days a week for about 4 years. Clarence (Rhode) was flying there too, intermittently, then he came back to Fish and Wildlife and then he went down to Juneau. I knew him pretty well and he

called me and asked me if I wanted a job to run the Fish and Wildlife airplanes. I thought back and forth about it quite a bit.

I had been out at the Lake. There wasn't much there. There were a few airplanes around there and a few buildings. Fish and Wildlife had about three old buildings that were about to collapse. There were some airplanes in the snow. He contacted me again and I decided to go. There wasn't much there and they had practically no money. The old airplanes were military. Some had floats on and some didn't. A few had skis. Some didn't work. I had two guys, mechanics, and had the building there but it was so old, you couldn't close the door. For a couple of years, we were in trouble. We were really having problems getting things going.

I want to tell you something here – I have had three strokes recently. The last big one that I had, I can't write, I can't do anything, except I can talk! (applause) Names are difficult for me to recall.

Clarence would try and make the money go by. He had about 20 people that he tried to get enough money for people to live. It was the strangest operation I ever saw in my life.

I thought, we just got to do a better job. Finally the hangars were built. We built the first one ourselves (Terry: This hangar is currently the State Fish and Game, the corrugated building that showed up on the railroad car and there was no money to hire anyone to build it so the pilots and mechanics put the hangar together and it is still there today.) We had a little bit of help because there was an engineer down at the railroad. We made a deal with him. He would come over and see us about every two weeks to see how we were doing.

Then we got the new hangar but we didn't have anything in it. We had no chairs, shelves, files, no place to put things. At the time I was trying to get rid of some of the old airplanes and get some better airplanes. Of course, I needed some more money. Some of the guys that were flying up there had a little more money from their outfits so we would buy a small airplane with them for something. It was quite an independent operation.

It took about 5-6 years to get most of the small airplanes. We had the Widgeons and we were getting Gooses by this time. We would go down to New York or somewhere and fly one back here from the military. We finally got six of them. We finally got rid of the Widgeons.

There was one guy down south of Anchorage, Dave Spencer, wanted his Widgeon so bad. I was getting rid of the Widgeons. I did a bad thing for him. He should have kept that Widgeon. He liked it so much. He flew well. But anyway, I got rid of it and I'm sorry about that.

We went on and built up the Goose's and everything got painted up finally. That took a number of years. We were flying day and night especially during the summer, watching the fish people. Finally toward the end of my time there, we decided to build a Goose that would go a lot farther and do a lot better job. That's when we decided to build up N-780. I flew that for about 2-1/2 years. It worked perfect!

Then OAS came in to be. I had enough time in so I left! (Applause)

Bob Richey

That's a hard act to follow. Thanks, Theron. I have to admit that I feel really humbled here in this group because I'm a new guy on the block. These gentlemen have been around for many, many years. I know some of their stories. I know some of the equipment.

I got my flying time out of San Diego (skip in tape) and picked that up at _____ Field out in Oklahoma. I had less than 200 hours when I came up here. I came up in 1959. I hitch hiked on some diesel trucks up to Seattle and watching those guys shifting gears, 15-fore, 5-speed main box, 3-speed brownie. I kept watching them and by the time I got to Seattle, I could probably do it myself.

Then I flew up with PNA. PNA were flying Connies. I took the Goose (?; shuttle?)on to Ketchikan and spent a couple days there and went into Cordova and Anchorage. I caught the train and went to Fairbanks. I checked with the University there for some additional training. I got out of the Service. That's when I started my training because we had 3 years to pick something up on the GI-Bill. I figured that I already had one degree at the time so I got my ticket – that was less than 200 hours.

I came up in 1960 to stay and then I didn't use it for 5 years. I went to school for another 3 years, got another degree at the University of Alaska and was hired on for the summers. My summers then were at McKinley Park. Some of you know the Eielson Visitor's Center. I was there for 3

seasons. I headed for Kenai and was hired on as a wildlife aide and later on as a biologist.

I didn't start flying again. I hadn't flown for 5 years. They were getting in a bind there. They had Ave Thayer, and Will Troyer. They were getting in a bind in 1965 so they sent me up to Anchorage to check with my first mentor, Theron. He probably doesn't remember this but he said, "alright, we'll go out." He put me in a 185. I had started out in a Taylor Craft. I am still amazed what a little 65 hp Taylor Craft would do. We were doing spins, loops, etc. down in San Diego. Here we had this 185 and I probably didn't give Theron a very good ride. I spent 4-5 days with Theron in the 185's and 180's. He probably felt that I should settle back to a Cub.

About a month later I was trained on floats and I got checked out on floats with Ray McNutt(??) there in Sterling. Then I went to Anchorage to get checked out with Theron at Fish and Wildlife. I still remember, he took me on the other side of the pond (Cook Inlet?) and he said, "Bob, pick out a lake and let me see what you can do." A little bit off the starboard corner I saw a long lake and the wind looked like it was coming pretty much from the north and that would be a straight in. I started to let down there and had it all

figured out as to what I was going to do. I was going to grease this on. Theron said, "aw, just a minute, let me show you something. I've got the controls." He took over, and off to the right he goes and then he lands crosswise in this narrow lake. He dropped it in over the grass and I remember him pushing forward. He didn't stub it but he sure stopped it. He said, "this is what you can do on this stuff." Here I had about a 2-mile lake that I was going to land on. I'm sure he doesn't remember that but I sure do.

I stayed in Kenai as most of you know, although they tried to ship me off many times. The first time I was in the large hangar, across from the State hangar, the Bureau of Land Management was in there with the Fish and Wildlife Service. This was prior to OAS.

The BLM had some 180's that they didn't fly in the winter so we picked one up for the Kenai. We flew wheel/skis in the winter and then went back to floats on the Cub in the summer. I must admit Jerry and his crew is very modest because they did, in those times, some tremendous modifications. He gave us a wheel/ski Cub with oversize tires and special skis. When you were on skis there was still about ¾ inch of tire so you had some control, some brakes even on the ice. It was really beautiful.

A lot of modifications were done. We picked up the Borer prop on the first plane that we had. We did a lot of, well experimenting. Kenai was so close to Anchorage and we flew in to Anchorage frequently.

At that time, I was responsible for some oil and gas operations on the Kenai. There were some Nodwell drilling sites that we had to get into and the only way we could go in was to fly in on skis and at that particular time, they were close to a figure "8" lake and I refused to go into it. I think I had 739 there which we had in Kenai for many, many years. At the time, the policy was to change an engine every 1000 hours. I remember that particular plane, we put in three different engines. I wouldn't go into this lake even though I had lots of hours in this plane.

I got into Anchorage and Jerry said, "let's try out this new prop and see how it works." So Jerry put it on and I taxied out in Anchorage and it was just phenomenal! I knew the bird well with the standard prop but it was impressive. That late afternoon I went into this lake and checked on the seismic crew and had no problem getting out of there. It was just really that much difference.

They worked us a lot down there. They built up some beautiful wings on a Cub years ago. It was too bad when OAS took over, because they took the wings off. Unfortunately, we left the plane in Anchorage too long. I'm still sick about that!

I had the opportunity to continue my training instruments and I kept on working on my tickets in multi-engine and finally got checked out in the Gooses and the Barons. I was fortunate enough to fly N-780, the turbine. I was very fortunate to drive right seat on that.

--(end of tape #1) –

--(start of tape #2)—

Jim King

I was attending the University in Fairbanks in the late 1940's. In 1951, I got offered a job through the Dean's Office to work for the Fish and Wildlife Service for the summer. I didn't have a summer plan so I decided that I would do this. One thing lead to another and I wound up as a stream guard in Kenai for the summer and that fall I went to a trainee position in Fairbanks. I was working for an agent named Ray Woolford.

It was kind of interesting in a way, I never took a Civil Service Test. I worked 34 years for the government and never took any of the tests that people have to take nowadays.

In any event, we were doing a lot of winter trips out of Fairbanks and Ray Woolford was a really capable pilot. The plane he used was an army surplus L-1 Stinson, which was sort of a grand Super Cub. It had a 300-hp radial engine but there were just two seats in it, fore and aft seats like a Cub. Nobody had ski/wheels in those days. We had great big wooden skis with metal sheathing under them and they didn't turn very good. Backtaxiing down the runway getting into position for take off, if you did it just right you could blast the tail around and it would come around to a take off position.

If you didn't do it just right then there were a number of things to do to get that monster turned.

One of the things was to find a stick of wood and tie it under one ski so that it would drag. The handiest thing, for the pilot, I quickly learned, was for the passenger to get out and push on the tail while the pilot exercised the engine. There would be clouds of snow and extra gear blowing away (very refreshing at subzero temperatures). This was a great inducement for becoming the pilot!

I started taking flying lessons in Fairbanks. I believe it was 1953 that I checked out with Theron Smith. I had 100 hours in my logbook and was authorized to do limited flying under the direction of Ray Woolford. I flew until 1961 as a game management agent out of Fairbanks. I then went to Bethel for a couple of years as refuge manager and then Hank Hansen, who had developed the waterfowl project in Alaska, took a promotion to the Nation's Capitol.

I had been doing surveys. Part of our duties with the old management and enforcement division was to do air surveys, duck banding, and things like

that. I got involved in waterfowl that way. After Hansen left I did the waterfowl survey program for 20 years and used a variety of airplanes. I flew government planes for 30 years.

One of the planes that I used for a number of years was the standard Beaver. Those of you that have flown Beavers know it had three tanks in it plus two wing-tip tanks. You had to switch tanks for the three fuselage tanks and if you didn't switch in time the fuel pressure would go down and a little red light on the panel about as big as your little finger nail would go on and this would tell you that you needed to switch.

Well, my job was to look out the window and look for ducks. Periodically, I would miss this little light when it would go on because I was looking out the window and the engine would quit. It would be a little nerve wracking at 100 feet. I think though, I had good advice in doing low-level surveys. One of the things that we learned to do was do what we needed to do at cruise speed. I always did that and I never did crash when the engine quit. I came in one time and told Jerry Lawhorn about my problem with this little red light. The next time I came back for my airplane, there was a light bulb on the post there between the door and the windshield and that light was so

bright that even if I had my eyes shut I could feel the heat! It went off like a bolt of lightning. I never let the engine quit again.

Another thing that bothered me was when I was flying in Southeast. You could buy gas anywhere in Southeast on floats. You taxied up to a floating dock. With the Beaver, to fill the wing-tip tanks, you had to climb up on top and it could get pretty exciting. I was in Ketchikan one time and I was on the outside wingtip filling the tank and a seine boat went by. The wing started going up and down about 8 feet. I got one finger inside the gas filler hole there trying to hang on and hold the hose with the other hand.

I complained to Jerry about the lack of things to hang on to on top of the Beaver. So, when I came back, he had this neat little pair of goat horns screwed into a couple of rings on the top. I thought that was pretty neat! I flew a couple of trips with these goat horns on top. Then he decided that the tail was fluttering or something, so they had to go. Those were a couple of nice things that Lawhorn did for me.

Later on, I started flying the turbine Beaver. The first trip that I made with it we were looking at a lot of the refuge areas or the areas that are now refuges.

We made about a 3-week trip from Tetlin all the way to Kotzebue looking at what are now the refuges.

Jerry was in the back seat telling me how to run this thing because I didn't know anything about turbine engines and the fuel system was kind of cranky. Anytime I had a question, I would just holler at Jerry. Later on, one of the things about that airplane was that it was put together beautifully but no one ever put an operator's manual together on it that you could refer to when you got worried about things.

I had a 7-digit operator's manual which was Jerry Lawhorn's phone number! I considered that my security blanket. I never left home without it. I called Jerry on weekends, at night, early in the morning and whenever something happened that I didn't understand. He seemed to always be there.

Another feature of the aircraft operation was I think they probably got almost as many WWII radios as they did surplus engines. We had a radio system that wouldn't quit. I think there were l50 or so stations, in automobiles, vessels, offices and in wives' kitchens. Ray Tremblay's wife operated a radio from her kitchen for a number of years there in McGrath

and she talked to people in the air. I remember she would apologize if she had to go out to the store or something and be off the air for a little while. She took good care of us. Millie Pinkham at Tok was equally devoted.

At any rate, these radios really worked and most of the time, we could talk to the hangar here in Anchorage from anywhere in Alaska. Sometime those HF radios would get messed up with something – I don't know – maybe shooting stars or sunspots or something. The nice feature of that was there again, for those of us that were specializing in other things besides flying, it was nice to be able to call somebody when you had an airplane problem.

I think at least three times when I felt like I was in dire straights, I called up and talked to Theron. One of the times, I was somewhere over the Yukon Delta with the Beaver and it apparently swallowed a valve and the engine started running really rough. I got over the Yukon River I didn't want to be over the Yukon – I wanted to be over the Kuskokwim and get back to Bethel. After I got on the River, I called in and Theron answered. He was in the air. We discussed what might be the problem with the plane. I don't remember where he was going but he monitored me all the way and I got back to Bethel with the thing.

Another time, was with the first amphib-float plane that came to Alaska, a 180 Fish and Wildlife plane. It had some kind of electrical gadgetry in the floats to bring the wheels up and down. It hadn't been really perfected. It needed tapping or kicking or something every now and then to get it to work. Sometimes you couldn't get the wheels up after take off so then you would have to land on an airport and sometimes you couldn't get the wheels down so then you would have to look around for the nearest water. That happened fairly regularly. So it often took an extra landing before you got where you wanted to be. I never did figure out any way to kick these switches in the air.

There was this one time out of Bethel that I got in the air and got the thing stuck; one set of wheels up on one side and down on the other. That happened right after I took off with a full load of gas. I got on the radio and described my situation. I got hold of Smith and Lawhorn and we talked about the problem. They got the books out and looked at the possibilities. I remember the first thing they wanted to do was to make sure I knew which side the wheels were down on and which side they were up because of the mirrors on the wings that looked on the opposite side. We checked that out. We decided to get rid of the fuel on the side that didn't have any wheels.

I had to fly around for a couple hours while we hashed this over. I finally landed on the runway there in Bethel. It really wasn't a bad landing but the thing was it was so neat when you had something like that happen, to be able to contact the guys in the shop and they were always there. I don't think OAS has been able to duplicate that service.

There were other instances. One year I took off from Hughes in a Pacer. I just got underway pretty good. It was cold (-40 Below). There was a pop and the windshield split. I called up and talked to Smith again. He said, "well, you ought to know there is some question about whether the airplane will fly if the windshield comes out." So, that was very comforting. I was able to get back to Hughes.

Really, it was a neat relationship. I think those of us that were primarily biologists or enforcement agents or whatever, we had other things to think about besides the aviation thing. (My job description said I was a pilot operating airplanes in remote areas but my performance evaluation never said anything about the flying. We were evaluated on other things in relation to other people who did not take on the responsibility of piloting.) The old Aircraft Division gave us such really wonderful support. I think that

was something that was really gratifying in my career to be able to devote time to other things and still have that support. (We didn't have time to keep up with aviation literature, we needed to keep up with wildlife literature).

Smith used to send articles around and little items for us to study. He just kept us going. It is really neat to see Theron and Jerry Lawhorn here today and everyone else. This was a grand period of time, going back to the 1950's when we all operated together. Cal Lensink was part of that so I'll now turn the mike over to Cal.

Cal Lensink

Smitty checked me out in the 180. I was heading out to Bethel so I didn't need the airplane in the winter and then the next spring, my refresher course was to fly to Nome and pick up an airplane. Smitty and I landed at Nome and then got in the wheel airplane and flew back to Bethel. I landed at Nome reasonably well and at Bethel reasonably well but progressively my real flying deteriorated and I came very close to ground looping the 180 and I don't think I have ever been on wheels again since! It was strictly a float operation out at Bethel.

In that area, summertime float flying was probably as safe a flying as you could get in the world. There were no trees to run into to so if you could get the plane off the water, you would really be home free. There is water almost everywhere so even if an engine would quit you would be awfully unlucky if you couldn't plant it in the nearest pond.

I worked a deal to have another pilot or one of the mechanics fly the plane out for me. I didn't want to come into Anchorage to pick up an airplane. I would bring it back in the fall if necessary. But in the spring, coming into Anchorage, the weather was frequently bad and I could get stuck in Anchorage for 2 weeks at a time.

Smitty came out with the plane one year and gave me my checkride. We flew out to the coast and it was really nice weather. The water was calm and I came in and landed at Old Chevak, just a little too hot. I barely touched it down, really nice and smooth, it bounced and touched down again really nice and smooth and finally on the third one, I got it stopped. Smitty's only comment was "three very good landings, I suggest you start working for one."

Of all the check pilots I was with, Smitty was probably the best because he could make you feel comfortable in an airplane. For some reason or the other, some of the check pilots would just make you uncomfortable and uncertain. I always felt like Theron was able to put across what I had to do and I was fine with his instructions. Actually, I was a very limited pilot in that virtually all my flying was on the Yukon-Delta which I indicated was really the safest, particularly in the summer time. I tried to avoid all adventures in an airplane.

Tom Wardleigh

I got interested in aviation very early in life and was an apprentice mechanic at Boeing Field for Pan American Airlines while I was going to high school. During WWII, I was in the Navy as a mechanic. I went to work at Kenmore Air Harbor immediately after WWII and learned to fly there. I feel pretty privileged to know some great people. In the course of working there in the State of Washington, they ran a Sea Bee up on a log in a night landing in a river. In an effort to repair, through great good fortune, we had bought five wrecked Seabees all in one pile after a windstorm.

We took a look at the State's airplane and we made a reasonable bid to restore it. It was pretty badly scrunched. We realized that if we cut it off at

the chine line and across the hull we had another tail that would just fit right on there. We did that and by gosh the job turned out just way better than anyone could have imagined. Instead of a month to repair it, we had it out in about 4 days and instead of the bid amount we told the state pilot, that we'd just bill him for the time and materials because it was about one tenth of what we bid. Of course, he was pretty delighted.

I asked him what the chance was of getting a cushy job like he had, working for a government entity instead of slaving away 7 days a week, 12 hours a day like I was doing. He said, "there is a fellow in town that hires pilots sometimes and I would suggest that you talk to him. His name is Clarence Rhode."

Well, I made an appointment and I met with Clarence. We had a discussion in the middle of the night one night and the upshot was that I showed up here in Anchorage and met Theron Smith and went to work in September 1951.

This was possibly the luckiest thing that ever happened to me in my whole life because I learned a lot, had a lot of fun, met folks like Jim Branson. I

am telling you he is one of the most courageous people in the entire world. He flew an awful lot with me in the Widgeon and neither one of us knew how the trip would end.

It was a wonderful time because it was like family. If you went to McGrath, you stayed with the folks in McGrath whether it was Lyman Reynoldson, or Ray Tremblay or whomever might be there. If you went to Dillingham, you stayed with a family in Dillingham. It was just like a great big extended family.

Some of the happiest things that I can remember is having a Goose either down on the Pacific side or in Cook Inlet and meeting the research vessel. They would give you a garbage can of fresh caught king crab or a great big halibut or a bunch of salmon. On the way home you would just call on the radio and say, "hey, I've got food on board, let's have a party." All the folks that worked in the hangar, the mechanics, secretaries and all would bring their families and we would share a seafood dinner and everybody would bring a dish of Jell-O or something. It was just a golden period in my life. I look back on it just in awe that we could do so much with the few people and such little money.

We always wondered what these biologists were thinking about. Jim mentioned that they had other things to think about other than flying and some of us in the aviation business wondered what in the world that might be! One of the things they thought about was hauling canoes around for duck banding and waterfowl work.

We had some creative mechanics in those days and they looked around at the parts, pieces and miscellaneous that we had on hand. They took a Pacer fuselage that was setting in the corner and took Super Cub wings and a tail that happened to be lying around and some Mono-coupe floats that were off of an expired Mono-coupe and somewhere came up with an Apache engine and prop. They put this little menagerie together and it actually looked pretty good. You could put two 17-ft Grumman canoes on it and fly them anywhere you wanted to go. It just flew like a dream.

We had one of the field biologists/pilots in town and he wanted a float plane rating. We got him going in this little creature. We called it a Sub-Cub. Everything was great and it was a Sunday. This fellow wanted to get back home with the airplane as soon as he could so I called up one of our really

good and understanding friends over at the PA, Dick Poit(??). He was the office chief for the whole group. I said, "hey, Dick, any chance you can come out on your day off and give a rating ride to a float plane pilot?" He said he would be glad to and he came out and they took off from the dock and went and flew and came back and tied up. It was the only airplane on the whole waterfront at Lake Hood. Dick was just heaping praise on this Pacer. He said "that's the best flying little Pacer I have ever seen in my life." About that time, another Pacer came in and taxied up. I tried to wave them off but wasn't successful. Dick took one look at the long winged airplane and the short winged airplane. One had a considerably more impressive propeller than the other and he said, "you know, I think you have done it to me again."

We use to worry not nearly so much about conforming to rules as we did to getting the job done. These folks have described that pretty well. If you thought the equipment was good enough and you thought the weather conditions were suitable, you just went ahead and did the work. That was a wonderful way to operate. I think our directions from the Juneau Office, speaking for Smitty and all of us, we got our budget and we got a Christmas

card and that was about it. If you didn't break the iron and you didn't have a problem, you didn't get much interference from the administrative side.

I remember the first week on the job, Elsie Hager was the head lady in those days and she gave me a long narrow tablet. It had four colored pages in it and you were to buy things with it. This was great. I could figure out how to put in the vendor's name and sign it.

We were having trouble with the Goose brakes. They were the old automotive-style brakes that didn't work worth a damn at best and they worked even less than that when they were wet. This slick fellow came in with 12 sets of Mallard brakes, cheap, at $1,000 a pair. So I wrote him a Standard Form 44 for $12,000. The administrative office in those days was in Portland and I don't know how Frank Rigert ever did it but he was standing by my desk with a scowl the next day. It seems the limit for me to write a 44 was $500. After a lengthy discussion, he realized that my responsibility was trying to maintain airplanes and that I didn't have any problem at all. His responsibility was paying the appropriate bill and he did indeed have a problem!

In a few moments of your life you look back and you really reflect on certain things and one of them was our magic Lear-T 30 radios where you let the antennae out about 63 or 64 turns. It worked that particular day and the voice on the other end was Dave Spencer. Dave had the Piper airplane of sort. It had an open cowling. It didn't have the closed later model Super Cub type cowling. This particular airplane had the cylindars sticking right out in the fresh air. He had been flying along down near Skilak Lake and the engine ran more poorly and more poorly and he finally landed. He was wondering if somebody could come and convince this engine that it ought to run. Smitty said, "no problem, we'll take the Gullwing and a couple of fire pots and some tools and see what's the matter."

We went down and landed and taxied up right beside the Cub on this lake. The Cub was sitting there, just like a duck on a pond, beautiful. It was just colder than cold. It was like –30 degrees. After we got out of the Gullwing, it kind of shuffled its shoulders and shuddered and sank in the over flow. Now it is a little over knee deep in water and snow and it is rapidly becoming a permanent part of the top of the Lake. I guess I'll just let your imagination picture this.

I put on a pair of snowshoes and Smitty stepped on behind me and the two of us hiked over to a cabin on one pair of snowshoes. I didn't have a clue but Smitty knew what to do and gosh, in less than three days later we were out of there! It was absolutely a wonderful learning experience.

Along the way I made friends with a fellow named Jack Jefford who worked over at the CAA. I guess one of the ways that I made friends with him was we had a lightly modified Pacer parked at the Beaver airport up on the Yukon River and a requirement to bring it back to Anchorage and adjust its attitude a little bit. I talked Jack into going in with the C-123 and loading the Pacer and bringing it to town. He did all those things graciously. In those days, the cooperation between agencies was just wonderful. He did it without charging us anything. It was a good exercise for the airplane and on and on.

In late 1958, we had been searching for Clarence Rhode who was missing. All of us turned out who were working there at the time and all the airplanes turned out and we really conducted the best search that we knew how to do.

We got back from the search without results, of course. I think you all know that.

I got this strange phone call from a fellow, Jack Jefford at CAA. He said, "Tom, those idiots in Washington have decided we can't fly the DC-3 single pilot any more and we got three DC-3's and three pilots and that makes it a little hard – could any of your guys come and be co-pilots for a little while?" It was freeze up and we couldn't fly floats, we couldn't fly skis, kind of dull days so I went over myself and Gene Stolz, and Emit Soldin went over and we just filled in as co-pilots in the DC-3's. At the end of a relatively brief period, Jack sat on the corner of the desk and it was about time for me to go back to work at Fish and Wildlife.

The Statehood Act had been signed by the President and nobody really knew what the division of airplanes, facilities, and responsibilities would be between the new state government and the existing Federal Fish and Wildlife. Jack had a beguiling way about him. He sat on the corner of the desk and he said, "you know, Tom, sign this piece of paper right here and you will get a transfer in grade from the Department of the Interior to the Department of Commerce and you get to hang your hat on that hat rack

instead of going back across the street." That's what I did. I never looked back.

I just felt I had a wonderful family to go to and in fact I did go back and Smitty was kind enough to loan us a Goose. Of all things, you just go and borrow a Goose? From one agency to another? Well, yes, there were a couple of Congressmen missing on a flight to Juneau – Begich and Boggs. We borrowed a Goose and in a cooperative effort between the Fish and Wildlife and the CAA, we did a part of the search. That didn't work either but we tried awfully hard.

In any case, I transferred to the CAA which ultimately became the FAA but I never felt that my family thought I was gone. I always could go back over and was warmly welcomed and it was just a wonderful time in my life, a wonderful opportunity to learn from people.

Ray Woolford was mentioned earlier. Ray was a great pilot. I worked with Ray –break in tape here – end of Tom's presentation.

John Sarvis

The next person would be Dave Spencer but Dave's health is poor right now but maybe there are people here that could refer to Dave and the flying that he did. Dick Hensel, can we start with you?

Dick Hensel

I may begin this discussion but I think most everyone here could better speak to the subject of one Mr. Dave Spencer. Dave would have liked to be here this afternoon and he hinted earlier that his presence would be possible, but his wife, Eloise, telephoned me this morning with word that he just wasn't up to it because of his deteriorating health.

By way of background, Dave graduated from Penn State with a degree in Forestry in the late 1930's. The advent of WWII had him enlisting in the US Navy wherein he soon became a flight instructor training young pilots to fly PBY's. Dave returned to the temporary job he had with the U.S. Fish and Wildlife Service before the war and was later assigned, full time to a refuge down in Florida. His primary responsibilitywas to follow and inventory migratory waterfowl from the Canadian Provinces southward into Central America. In this he excelled.

Theron mentioned earlier his love for the Widgeon amphib and this same love was shared equally by Dave Spencer. A remarkable story that comes to mind concerns the time Dave was instructed to pick up a surplus Widgeon at a Tulsa, Oklahoma airport where it had been overhauled and modified for Service use. He and a colleague, who may have been the Aircraft Director from the Washington Office at the time, I can't recall, began to taxi at a pretty good clip, when they had a hell of a time keeping the aircraft aligned with the median. Words were exclaimed to the effect this plane wasn't ready for this X Navy pilot to fly so the plane was quickly parked and shut down. In the process of the overhaul, mechanics inadvertently criss-crossed the rudder peddle cables.

To go on, Dave served as a flyway biologist until around 1948 and at that point, Clark Salyer the Service's Director, asked Dave to fly the same Widgeon, Number 703, which incidentally, I think is presently graveyarded someplace in King Salmon, to Anchorage. And situate himself in Kenai as the first Manager of the Kenai National Moose Range. At that time, poaching, mostly by miners, was added reason to station Dave at this location. And so, he along with his new bride Eloise, settled in Kenai and began keeping house so to speak in a small uninsulated cabin with a single

barrel stove as the only source of heat. As Dave tells the story, he spent most of his first winter there on the Kenai cutting firewood. At the time there was no highway connecting Anchorage or Seward but this soon became a reality along with Clark SalyerDAve's becoming elevated to the Refuge Supervisor for all of Alaska's federal refuge units.

I'd like to pass this mike to others because much of the classical work that Dave did in the early 1950's, well before my time, was certainly precedent setting, as for example, the development of waterfowl sampling methods. Jim King can best elaborate on this aspect of Daves career.

Jim King

One of the things about Dave Spencer was that he wasn't known for verbosity. In fact, we called him "silent Dave." It wasn't until not long ago, it sort of emerged out of the woodwork that Dave was the key in designing the Continental Waterfowl Survey program that depends on their aerial transects, that have now been done clear across North America for 50 years or more. Dave, whose degree in college was in forestry, was one of the people assigned to the Prairies when they were first starting to figure out how to do these transect counts.

They had established transects but it was Dave with his forestry training that knew how to do a little bit of statistics so that he could segment the transects and analyze them as a simple random sample. That system which he devised in about 1947 or 1948 has stood the test of time now for 50 years and we still do it every year. The statisticians will never agree that that was the correct use of random sampling because the transects aren't random. They are drawn so they are easy to fly but regardless, that's the information by which we have been managing ducks now for half a century. I think the system works because we have about as many ducks now as we did in the 1950's when the whole thing was first put together.

Dave has been an important person. He started aerial muskox surveys after he got here. He started moose surveys with the airplane. Perhaps more important than that was Dave had been a student of Aldo Leopold which he never talked about very much but he knew him well and had spent time in the shack where Leopold wrote his books. He worked with Olaus Murie in the Rockies and he went to college with the Craighead brothers.

When Dave came to Alaska, people were trying to think of how to get some pulp mills going so they could take advantage of all the trees that were just

going to waste and how to dam up the rivers and get some electricity. The politicians were trying to get rid of the Kenai Moose Range so that homesteaders could use it. To a very real extent, I think that the background that Dave had when he came, was responsible for people starting to think about additional refuges and wilderness areas and protection of the wild areas.

He really influenced the way Alaska is today and while doing this, he put together a superlative team of refuge managers. Dick Hensel is one. Then when the mood swung a little toward developing more refuges in Alaska, Dave trained refuge managers. We were the ones that knew where these new refuges ought to be and the refuge managers put together a 60 million-acre package of waterfowl refuges that President Jimmy Carter gets the credit for establishing in 1980. (Dave Spencer had us ready for this).

I thought maybe I would mention Hank Hansen and Chuck Evans as a couple of the old timers that I talked to in the last year. The Regional Office has me doing some oral history interviews with some of the old timers. Last winter I was going to be in the state of Washington and I called up Hank Hansen and made arrangements to get together with him on a certain date in

January. I wanted to try and record some of his memories about when he came to Alaska in the mid 1950's and set up the waterfowl program which really hasn't been modified a whole lot. It is one of the programs that has more continuity than practically anything that the Service does.

Hank invited me to come and stay with them. They live in Oak Harbor, Washington. A few days before it was time to go, I thought I would call up and just confirm the time that I was going to get there. I had trouble getting through on the telephone and when I finally did get through, I found out that Hank had just had a triple by-pass heart operation but his wife, Doris, told me to come on that they wanted me there. So, five days after he had a triple by-pass, Hank Hansen gave me his memories of setting up the waterfowl transects in Alaska. He is doing pretty good now. He also has diabetes and, so far, is conquering his health problems. I talk to him on the phone every now and then. He is interested in what's going on up here.

Another person that I talked to down there was Chuck Evans who is retired in Lacy, Washington. He spent a lot of time on the Rampart Dam studies and did a lot of flying on that. Chuck was one of the pilots that flew airplanes in China before WWII over the Himalaya's, high altitude freight

hauling, etc. He said he was writing up his memories of that. Chuck spent quite a few years here and is now retired and doing fine.

Dick Hensel

Two thoughts in this regard, one in reference to Bob Burkholder and another, Will Troyer. It would be more appropriate for Ray Tremblay to talk about Burkholder as he was directly involved in a bizarre mishap concerning aerial hunting of predator wolves. Will Troyer seasonally now resides in Arizona and lives in Cooper Landing during the summer and fall he enjoys his favorite pass time hunting Ptarmigan and grouse. I had the profound pleasure, and you might say, the agony, of working with Will at Kodiak and later in Anchorage from where he directed the wilderness land classification studies for Alaska Wildlife Refuges during the 1970's. Will went on to transfer to the National Park Service, and continued as a pilot even after severely crashing a Supercub at the Denali Park landing strip from becoming cought in a wicked downdraft. More to the point, this incident relates to the time Will gave me my first flying lesson in Kodiak when at the time I think he had only something like 50 hours or so of flying time. We sorely wanted to get into the flying business and decided to organize a local flying club which led to the purchase and joint ownership of a float equipped T-Craft, an ideal machine to learn how to fly.

It didn't have a starter and had to be propped by hand. My debut as a most naive student began when he flew solo from Long Lake, where the plane was moored at the municipal float pond, to the city boat harbor where he was to pick me up one evening after work. After landing in an ourtside channel and taxiing to a wooden ramp provided for the float planes inside the harbor, he exited the plane and we pulled it high onto the ramp, which was real slick and slippery with algae. His instruction was for me to access the prop by way of the right float while he occupied the left side seat and then, when the engine fired, I was to quickly enter and seat myself by his side. Following through, I attempted to prop the engine only to have the plane slip off the ramp into the water. I returned to the rear and pulled the plane back onto the ramp then went forward and made another attempt to start the plane to no avail. Observing these antics, uttering some remarks, then getting out of the plane he asked that I hold the tail to keep the plane stationary while he propped the engine and, upon starting I was to quickly make my way via the left float into the aircraft.

(Original from recording--- I got hold of the tail of the plane, he walks out on the end of the float, props it, it slides off the ramp, the plane is going, I'm riding the float, I get in and Troyer is not there! I look out the window and

he is swimming. He is swimming towards the ramp. I thought, "oh my God, what am I going to do." I didn't know anything about flying the plane. I pushed in the throttle. Here was this T-Craft splashing across the boat harbor with all these fishermen leaning over the rail wondering what in the hell was going on. Finally I got the thing stopped. I climbed out onto the float and here is Will just getting out of the water. I said, "well, Will, what do I do next?" He said, "paddle the plane back here." So I paddled and paddled and got the thing turned around and he said "o.k., that's your first lesson. I'm going to go get some dry cloths on and I'll come back and give you a second lesson.")

What happened next is that the engine started, I entered the aircraft now moving at above idle power, while Will fell off the float into the boat harbor. While he was swimming ashore I was frantically trying to stop the aircraft and being totally unfamiliar with procedures I pushed the throttle inward rather than out and the plane abruptly accelerated. Luckily I stopped the engine after striking the master switch then stepped onto the float about the time Will sttod erect, wringing wet, on the ramp. I proceeded to paddle ashorte while at the time commotion attracted a number of fisherman spectators peering from seiners moored nearby, and who no doubt were

wondering what these clowns would be doijng next. Upon getting situated once again upon the ramp, I recall Will remarking "OK, I'll take the truck, go home and change my clothes, come back and give you your second lesson".

Now Tremblay may want to relate the story with Bob Burkholder having to do with an aerial wolf hunt.

Ray Tremblay

Which wolf hunt? There were about six or seven of them!

Do any of you know Burkholder? Have you heard of him? You got to understand that this guy had a mission and his mission was to kill wolves and nothing else mattered. The airplane was a tool to accomplish this. I was in McGrath and he would come over because we had wolf problems there. Normally in any of our wolf operations, these were all Fish and Wildlife guys. We did shoot wolves in those days to get rid of them. Normally I did the flying and had the shooter do the shooting. With Burkholder, he made me the shooter and he did the flying.

It was an adventure. The only time that the needle and the ball (instruments that line up in smooth flying) were together was when they were passing each other! He could track wolves like no other person. He would get on a wolf track and he would follow that thing through caribou tracks and every thing else until he would find that wolf. It was about 40 degrees below zero and we were out chasing wolves. We finally found this wolf and he said, "kill it."

Normally we would shoot out the right window but we decided it was easier to shoot out the left window. It did work pretty good. So, I gave it a try. We had a 12-guage model 12 pump. We were careful to never put the shell in the chamber until we had the muzzle out the side of the window. I put the muzzle out the window and I could not feed a shell into the chamber. It just wouldn't go. It is 40 below zero and the thing was all froze up.

Burkholder was going crazy because we can't get this wolf killed. Finally I told him what had happened and he said, "well, feed in one shell at a time." So I took a shell and I put it in there and at this time, I had to bring it inside the plane to do this because my hands were all frozen. I pulled the gun inside and I put the shell in and I slid it forward and it went off. I did have it

pointed out. I want to tell you that three of the pellets – one hit the ball dead center! This thing went off in his ear. No ear phones on. Now he is livid! We landed. He said, "you don't know anything about a shot gun, let me show you." I said, "Bob, it is frozen." It was frozen with the firing pin sticking out. That is what happened. When I slid it forward, it jammed it and it set it off.

We tried thawing it out but we could never get it thawed out. He said, "we got to get that wolf!" We went up again and I actually shot that by putting the shell in the chamber and as we came over the wolf, I would slide the thing forward and we got the wolf! Now that is dedication.

--(end of Tape #2)—

--(start of Tape #3)--

Tom Wardleigh

We had a Cub that had been involved in a problem and it was up at Gulkana on a flat bed truck. I asked Burkholder if he would be willing to drive the truck back down if we flew him up. He indicated that he would be willing to do that so we piled him in a Pacer and flew him to Gulkana. He jumped in the flat bed and there was a whole Cub wing, fuselage, motor, the whole thing on the back of the flat bed.

He got the flat bed started up and vigorously backed it in to a snow bank and took off at high speed down the road for Anchorage. Well, when he backed it up, he kinked the tail pipe which broke the exhaust pipe up by the muffler. As he was driving down the road, the heat got the flat bed on fire but he is making 65 toward Anchorage with the Cub burning off the truck. He got a hat trick in one day.

John Sarvis

I will tell a Will Troyer/Dick Hensel story. It's just a little different than flying but I kind of relate to these guys. They were doing bear studies on Kodiak Island and at that time we weren't using helicopters. They had these padded traps. They would go and set these traps out and they would trap a bear occasionally. They would then tranquilize the bears and the way they did this was they had a tranquilizer on the end of a jab pole. After they had the bear in the trap, they would walk up and jab the bear and tranquilize it.

One day they were out checking their traps – this is how I heard the story now – and sure enough there was a bear and they go up to jab the bear. They sneak up there, jab the bear in the butt with their stick and low and behold the bear jumps up and runs off and they look around and there is another bear that is in the trap!

Another one I want to tell is when I first met both Jim King and Cal Lensink in 1971. I had gone to work for the Fish and Wildlife Service in Washington, D.C. I eventually realized my mistake so I got farther west. I was working in a branch of the Wilderness Studies. This was the time they were starting to consider establishing more refuges and parks, etc. in Alaska.

Jim and Cal were in D.C. They were there to testify about establishing these lands. What they were saying earlier about Dave Spencer, also applies to these two and I hold a lot of gratitude for the work they did.

There were people that wanted to establish refuges but these guys knew, from flying all over the state for many years, where the good waterfowl places were, and where the wildlife places were. Anytime you actually put lines on a map and figure out the sizes and shapes of these places, these two guys were in Washington doing a lot of work on that. Most of the people in Washington had no idea about Alaska and where the wildlife and waterfowl were. Jim and Cal had a lot to do with these selections for establishment of refuges, parks, etc.

Terry Smith

I was in a unique position to watch literally hundreds of check rides and advice sessions, you might say. It was interesting to watch procedures that are used to this day molded and changed to fit the concept of the low level survey work and the wildlife management that went on. You knew that this was the conceptual stage of some of this because it continued to change.

As folks came in, they would get in a 180 or a Widgeon or a Goose and head off and go do their thing.

The low-level work and the ground reference maneuvering that took place was not very well conceptualized at that point. There hadn't been a lot of it done. The military had done a lot of things with target focus and things like that but low level light airplane work across the country was a normal thing to do. You would watch as the training took place and having the airplane stabilize when you would go by something.

Dad, Ray and Tom, they would all work to make this as safe and it could possibly be done. One of the things that came out of that, of course, is something that is a benchmark today, especially if you are secondarily listed in the aviation aspect of what you are doing right now.

The Bob Burkholder syndrome of what's on the ground is all important as long as the airplane stays together long enough for you to get to it or get it. That's the case. Your job is not necessarily as a professional pilot flying the airplane. Things like a stabilized airplane for any type of a visual pass, you don't have the airplane decelerating and changing configurations coming up on a kill or the dead animal that you are looking at. You have the airplane

stabilized just short of that so when you go by it, everything stays the same. You got 20 inches on the 185 and you are set up. That way it is not Christmas when two seconds later you are done with your viewing and you look back inside and wholly cats!! – there is no airspeed, there is no nothing and it's faced uphill.

It was very interesting to grow up during a period where a lot of those things were being tested, changed just slightly, and made into the very core of what we use today in low level survey work.

One time after a long, long day on a marine mammal study on a sea otter survey, one of the observers in the back made some comment about he didn't realize you could fly an airplane that low that long. Dad's response was "yes, you can fly an airplane real close to the ground for a long period of time as long as you stay parallel."

Ray Tremblay

I want to tell one more here on my good friend, Theron.

We did a lot of flying together all over. This guy taught me a lot. He taught me on instrument flying – don't only look at your instrument chart but when

you are making an approach, have your VFR chart there so you know where the hills are and you are not just making this blind approach into something especially when you are going in for the first time.

We made sea otter surveys out at Amchitka, and walrus surveys between Nome and the Russian coast. I remember this particular time, I was doing the flying and he was doing the navigating and the biologists were doing the counting of the walrus and we were flying at 500 feet going between the Alaska coast and the Russian coast. We had been advised not to get too close to the Russian coast because we didn't have any authority.

So, Theron is doing all this navigating, doing this for 6, 7, 8, 9 hours and trying to keep an idea of where we are over this open water and some ice and whatever. He was doing a pretty good job. We didn't have GPS's and all that good stuff. We were doing this flying at 300 feet and then we started getting into fog. We didn't want to pull up at that point because we were near the end of the survey.

We still had some surveying to do so we stayed under the fog as long as we could. Then Theron said turn north now and fly for so long and I did. Then

he told me to turn east again and we will start in that direction. So going along, not only in the fog but we're at 300 feet and pretty soon, we are over land and we are flying over some kind of a town or a village and there are people down there and then we realized we were over the Russian coast!

Theron told me to just keep flying straight because we don't want to make like that we are doing something that we shouldn't be doing here. We were flying along and we had three biologists. Pretty soon, here was a MIG right along side of us. Theron said, "now just keep flying, don't pay any attention to it." This MIG would come out from behind then it would disappear then come right along top of us and then it would just make this turn and disappear again.

We kept looking at the international signals. If he wags a wing this means we got foul or he is not responsible for our safety or whatever it was. Now, of course, we are starting to take pictures of this. We got some great MIG pictures. This last past, whatever he did, he came around and he came right across the front of us. He had everything hanging down. He had his brakes down, his flaps, his wheels, and all. He was just practically stalling. I remember my first thought was that he was such a little guy. I thought they

were supposed to be big. Just his head poking up and now he is taking pictures of us.

We had Red Dodge's DC-3 and it had this painting of this naked girl on the side of it that said "Hello Dolly." That's what he was taking pictures of! When he went by us, we were at 200 feet. He finally decided that he had better start flying and he poured the coals to that thing and he went right down almost into the water. Water was actually spraying from behind this MIG when he was trying to get his air speed enough to fly away. Theron and I both said, "man, if he goes into the water, we're both in deep yogurt." Anyway, we made it.

Theron is a wealth of knowledge. One of the things that you got to have in your flying career is a guy like Theron and a guy like Tom. I know that Tom, making me do it, says, "let's go out and do a check ride." To me, a check ride should be more than just going up and doing a few stalls and doing a few turns, etc. What Tom and Theron did was get out and have you do what you do in your operation and let them see how you do it.

Tom took me out and wanted me to show him how I did a wildlife survey, following a trapline trail. I told him that I would get about 500 feet. He told me to do that then he said, "why don't you slow it down until you think the thing is going to stall and then fly." So I did that and then he said, "now start making a turn and do the same thing, that is, get it to just where you think it is going to stall and recover." I did that. Finally he said, "do you really think it is safe practicing stalls at 500 feet?" I said, "hell no, I don't like it at all!" He said, "then why in the hell are you doing it?" I said, "cause you told me to!" He said, "look, when you are the pilot in command, if you don't feel like doing something, don't do it!" Theron was the same way.

Theron Smith

All those last years, most of my stories have gone away. My son, Terry, was 3 years. I remember one time when he was about 4 years, I had a Goose up on a lake and was getting some stuff out of it and had the engine running and he was sitting along side of me and I heard the engine roar up a little bit. I looked around and he is standing up in the chair, pulling on the power.

When he was a young kid, he couldn't look out the windshield. There were quite a few times that there were just the two of us coming home in the dark. He learned to fly instruments looking ahead without looking over the window because he couldn't see out the window. He could fly the thing fine and tell me where to turn, he would know where to turn. He learned to fly pretty good.

Terry Smith

One of the things that amazes me about the operation as it went on in the 50's and the 60's was that the training was focused on what the biologist/pilot was doing; just exactly what you are doing.

I think the practical test guides started showing stall recovery out of a turn to return to maintain the radius. In other words, the check rides that I watched in the early 50's, was in turning a stall. The recovery was made turning again. There was certainly no sense in learning to fly and recovering out of a stall in a turn by rolling the wings level when the whole reason that you were turning was because of terrain. That was the reason that you were stalling as you were turning probably after a pass or in the arena of wildlife surveying where you had been slowing and started to turn inside of terrain

confines. As soon as you started to turn, of course, the thing starts to shudder a bit. You know you are either going to stall or run into a tree.

I guess it was enlightening or amazing to me as I started to take private pilot training that all those turning stalls were recovered to wing level or nose down. After 15 years of watching people recover rolling back into the turn holding altitude, it is amazing that we don't have more responsive training in the general aviation arena. You are very fortunate to have the kind of training and the kind of check rides that you get. When you identify something that is not being trained the way that you fly the airplane, then it should obviously change because you fly the way you are trained. You are supposed to fly like you're trained and train like you fly. So when you find something that doesn't fit your operation, then get the training changed so that it does. It doesn't serve any purpose to be trained in something that you are not going to do in real life.

Theron Smith

I would like to talk about the future of the people that I trained for many years. The thing was some of these people had very few hours but we never lost one and we never had a problem. We trained them well enough so that the pilot knew what he was doing even if he didn't have more than 50 hours. You could teach a person so he would not get tangled up and kill himself. He might bust up the airplane but not kill himself. I just wanted to say that.

Ray Tremblay

We talked about pushers on the airplane. I flew the Gullwing a lot and we would have to have somebody in the back to push the tail around. So, we had the blasters and the pushers and that's what Jim was saying, "it was always better to be the blaster than the pusher."

I remember when Clarence Rhode, God bless him, decided we all had to have uniforms. Then Clarence decided that all the pilots were going to have to have a set of wings, which we didn't care too much for but that's what he decided. Sig Olson was one of the biologist at the time and one of our famous pushers. He told Clarence that if he required the pilots to have wings, then the pushers should have recognition also. He told Clarence that

he wanted a pair of cross show-shoes on the sleeve and then a hash mark would be given every time you got run over by a tail.

John Sarvis

I would like to mention one or two other names that come to mind before we give the audience a chance to ask questions. Jay Hammond was an early Fish and Wildlife pilot. Does anyone want to tell a "Jay Hammond" story?

Tom Wardleigh

The first winter I was here, I was working late one Sunday night. We were getting the Gull Wing on skis. This thing had a double bungee, about the size of my thumb and it was getting along toward 11:00 o'clock in the evening, not a soul around. I found that with maximum effort I could hit the little clevit up over the clamp with a clip on the fuselage. I was trying to hook up this bungee, using both hands but when I would take one hand off to put the bolt through the hole, I could not make it. It would slip back just enough that I couldn't do it. I would brace my elbow on my knee and was just using all I had and was just desperate to get this damn thing done and go home.

Out of nowhere, no sound, no door open or close, this big hairy hand came down and grabbed the bungee and said, "why don't you put the bolt in, son." That was the first time I ever met Jay Hammond.

We were tired and I was dirty. It was Sunday night and we decided to go get a hamburger. We got in my car and drove around and we came to this little Quonset hut, Garden of Eatin, it said. We went in and there were white table napkins and just a beautiful restaurant inside this Quonset hut. I started to excuse myself. I told the lady that we were just looking to get a hamburger and that I was sorry to bother. She said, "sit down, we'll make you a hamburger." One of my first meals I had in the City of Anchorage was at the Garden of Eaten with Jay Hammond in my dirty old work cloths, almost midnight on a Sunday night.

Ray Tremblay

You must read his book to appreciate some of the things that he did. I remember the time he landed on skis down south of Cold Bay and he broke both ankles. Jay is really crippled up badly. It is a shame to see him that way, physically. If you see him or get a chance to write to him, give him a "hello." The last I heard, he went on a pheasant hunt with Jim Reardon.

Jim Branson

Jay is getting pretty badly crippled up and on this particular hunt, we had a stool and we would set him up on one corner where the drive was going to be. He could swing pretty good to the left as long as he could lean back on the stool. He did pretty good. He is still a good shot.

John Sarvis

Another person is Gordy Watson. Gordy was the Area Director for quite a while and did a fair amount of flying too.

Ray Tremblay

Yes, we just had a surprise birthday party for Gordy this past Saturday night on his 75th birthday. As you know, Gordy was a biologist up here and then became the Area Director and did a lot of flying. He was involved in one serious wreck when we were looking for Clarence Rhode the second summer when he was out there at Mt. Michelson. That accident is one that we talk about. I talked about it with the pilots with the State and that is going up into a canyon and then making a down wind turn and unfortunately, that is what he did. He and Don Thurston spent 5-6 days up there before they were found. He is doing fine. He is living in Girdwood and he is still teaching skiing. He is leaving early tomorrow morning for Hawaii.

John Sarvis

Let's have a few questions from the audience.

Can someone address Bob Baker?

Jim King

Bob Baker was a predator/rodent control agent in Kotzebue for a number of years and then he got tired of that and established Baker Aviation in Kotzebue. One of the things that I remember was when he was still working for the Service, he lived in this very small little house. It had a little porch on it and on the roof of this porch, he had this pet raven that he was feeding.

We went by one day and Bob had decided that he didn't like the neighborhood that he was living in and he had his house hooked onto a caterpillar. There were some skids under it (the house). He was towing it down the road, moving it to a new location and here's this raven sitting on top of the porch roof like he was in command.

Question for Tom Wardleigh: How did the Mountain Goats get to Kodiak?

Tom Wardleigh

The goats got to Kodiak a few at a time and very, very carefully. There was one person producing goats right at the head of Eagle River here. He would trap them and give a call that we needed to come get the goats. My second flight for the Fish and Wildlife Service was to take a brand new Pacer to the head of Eagle River and pick up three Mountain Goats and bring them to Anchorage. This guy was some sort of a character but he really knew how to trap goats.

One day he called in and said he had some. We went up and he was sitting on a rock with his chin in his hands looking very disgusted and a little bit angry. He had been leading the goats across the creek. He had them on leashes, and he stumbled and fell and there were three goats running around with leashes, all of them wondering what to do next but none of them were ready to get in the Pacer and come to town.

We would compound them in the hangar then haul them over to Uyak Bay and put them off on the beach, all except one. That one, Dave Spencer, just happened to be flying over Crescent Lake down on the Kenai and there was a goat swimming across the lake so Dave landed. He did the proper

interview with a new employee that was sitting beside him and wrestled the goat into the Widgeon and they wound up in Kodiak.

I guess under Mike's tender care, there are now many goats, distributed from one end of the island to the other and some limited amount of hunting for them. They were, by the way, delightful creatures, as far I knew. We had one big old billy goat but we didn't want to make the trip all the way down just for one goat. He became kind of the mascot. We had a small surplus tug that we moved the airplanes around the hangar with and in the morning you would come to work and here would be the goat standing up on the hood of the tug just waiting for someone to come scratch his head between his horns. It was really a pleasant animal and a delight to be around.

We finally hauled him down to Kodiak. As far as I know, the goat transplant was one of the really successful things that took place.

Another fellow named Roger Allen. He was a sport fishery biologist. He thought it would be nice to have some Grayling on the Kenai. There was some preparation involved in making a still so long and so big around. We fixed one of the Widgeons to capture the outlet air from a vacuum pump, put

it through an oil separator, run it down the still that was mounted on top of the Widgeon, put the tube in through the little ventilator on top of the cabin roof. You could stack milk cans full of fish and run the pump on one engine and keep them oxygenated. We took a beach seine up to Lila Lake and seined up some Grayling, put them into these water cans and loaded them in the Widgeon. We would fly them down there to a lake and I was really amazed because Roger was very thorough. He didn't just pour the fish in the water which I thought was what would happen. He put the can in the lake until the temperatures stabilized and tipped the cans a little bit into the water so the water exchange could take place between the can and the water. Finally he laid the can down and every one of those Grayling immediately went into the wheel well of the Widgeon that was on the beach. I guess they wanted the shade; wanted to get out of the bright sunlight.

The transplant was one of the very successful ones and I understand the Grayling fishing on the Kenai is very good. It makes you feel like that some of that work was really worth while in the long term.

Question: Tom, can you tell us the story about the mechanic that ended the engine failure problem? You told us about him when you were sitting in the Beaver last summer.

Terry Smith

That's the kind of thing that went on. Tom was heading up the maintenance end and between Tom and Jerry and people like Vern, they just didn't let system failures or consistent failures continue. You just made a better part.

Tom Wardleigh

I guess I'm disconnected from that particular story. I do vividly remember though an education in economics and integrity that we learned when we first got the super Widgeons. We took the Widgeons down to the Portland area and had Lycoming engines put on in place of the Rangers. On about the first or second take off, one of them had a major failure. The little stud that sticks out on the magneto to interrupt the rotations for the impulse coupling, in order to start the engine more readily, broke and went down between the crank shaft gear and the cam shaft gear which effectively split the crank case. This just made a total ruin out of the engine. The series of events were relayed to Lycoming. I think we had just bought 15 or 16 of those engines, enough to put in 7 Widgeons and have a spare.

Lycoming disclaimed any responsibility because it was a Bendix magneto. So we contacted Bendix and they were just as good as gold. They sent us a brand new stud! (laughter)

Clayton Jenson came over to work at Fish and Wildlife, about the same time that Lawhorn did, I think. We had a host of folks that came in all looking for work on a day when we needed some folks. Clayton was a man whose

face showed a lot of mileage. He was a very quite fellow and I remember interviewing him. I asked him if he could do sheet metal work and he said, "yes." I asked him how he was on fabric work and if he liked to do fabric work. He said, "well, I can do it." He had no enthusiasm about anything.

Vern Bookwallyer(??) was the overhaul man at that time and Vern, who was about 70 years old, thought he would go homestead before he got old. He resigned and went down on the Kenai. I was a little concerned on who was going to do engine over haul. Clayton quietly came over one evening after work. Everyone else had gone home. He said, "Tom, if you haven't promised the engine shop to somebody, I would really like to take a chance at that."

We had spare engines needing overhaul of every shape and form and description. We had a lot of different airplanes in those days. I don't believe we had a spare made up for anything – not the Goose, not the Widgeon, not the Gullwing, the Pacers or the Super Cubs. We had engines waiting for overhauls.

In less than a year, we had spare engines for everything, ready to put into airplanes. The piles of stuff had been sorted; the tools were all in order.

Clayton was one of the most effective and most pleasant men that I have ever worked with. I had written up Clayton for an award for superior performance in his job and sent it to Juneau.

One of our illustrious pilots had properly drained the oil from a Super Cub one cold winter day and the next morning, forgot to put the oil in, took off and flew up quite a ways and the engine failed. Well, because we had an engine failure on one of Clayton's overhauled engines, his award was denied and I still bitterly regret that. He had a heroic performance working for the Fish and Wildlife for a very modest wage. He just out performed anything I had ever seen in the area of dedication to the job. That was one of the saddest days of my life when his award was denied.

John Sarvis

We will stop now for lunch and those of you who want to rejoin us after lunch are welcome to resume some of the stories.

Ray Tremblay

I have a story with a moral, I guess. One of the things we teach off airport take offs and landings is when you get ready to take off, you go ahead and you walk the gravel bar out very carefully, and you mark your spot. Usually you select a spot that says this is where I am going to take and if I don't get off at this spot I've got enough room left so that I can stop the airplane.

I went on a moose hunt with a friend one time in his airplane. There were three of us. It was over in the King Salmon area. It was back in the years when you could locate, land, shoot. It was legal. We flew around and we spotted a nice cow moose and we landed in pretty much tundra type terrain. It was a beautiful day and after we got through butchering the animal, I said, "I'll pack this thing down on the gravel bar for take off." He said, "no, no, I can take off right here."

It was his airplane, with big tires and he said he was going to take the plane off from right there where we were. He did everything right – he walked it all out, he took the seats out and he put it at this spot and he said, "now this is where I should be flying." Then he put some other seats in a different spot and he said, "now here, if I am not flying at this spot, this is where I chop it

and I've got enough roll-out left that I don't have a problem with the airplane."

I thought, "man, this guy is really good, he knows what he is doing!" So, we loaded half the moose in the airplane and the other fellow and I stood at the halfway point and watched this take off. It was extremely rough terrain and the airplane is bouncing and bouncing. It gets to point one and it ain't flying and it is bouncing and it gets to point two and it ain't flying and he keeps going and he keeps going. He gets to the end, goes through the brush, hits a creek and the airplane turns over and it's wrecked. I start running down to grab him out and I said, "damn, what in the hell did you do wrong?" He said, "Ray, it was just ready to fly, it was just ready to fly!" Well, there was no way that plane was going to fly!

The point of this story is, and I have told it many times, when you make a plan and it's a good plan, stick with it.

Theron Smith

It was getting pretty close to Christmas and I was living in Bethel. This guy wanted to be flown down to the southeast, out to the mountain, more or less. There was a cabin there and he was going to stay there for the winter and try and do some trapping. The weather was fairly decent, so away we went and the river was still open and he had always been able to walk it across the river. We landed over in the grass. He said, "I can't wait here till that gets frozen, I'll freeze out here and won't have enough food." He said, "if you could get me on the other side of the river, that would be best thing."

I kept looking around quite a bit and I decided that maybe I could land in a certain place in there on the other side, pretty close to the cabin. Then I figured that I would have to chop down some trees to get out of there. I landed there. It was fairly short but made it o.k. The snow was about 3 feet deep, all soft. It hadn't frozen at the bottom. It was all soggy wet at the bottom. Of course, you stop the airplane in there, the skis freeze.

We got the stuff out of there and I started chopping and I was going to go around the bend, follow the oxbow of the river and turn off and come across this thing then I would get off the ground and away I would go. The trees

were up pretty big. I taxied back and forth in the snow and got it so I had a little bit of freezing on it but I should have stayed there another day. Here I come around the corner and soon as I got off the ice onto the snow the airplane wouldn't come around with me like it was supposed to. It ran into a tree and made a big dent about a third down the wing. That broke the tree down, of course, so I got that out of there. I decided that maybe I would just start across the ice there instead of going around.

By this time, the snow was freezing a little on the edges. I got in and turned around and got it squared away and away I go and all of a sudden I didn't quite make it and there was a whole bunch of small trees right over there and I ran through those. That kind of messed up the airplane quite a bit. There was a small lake in there that was hardly frozen at all. I went across that and got stopped in there. The one ski went down about 2 feet and I thought that was just the end of the day because there was no way I could get out yet that day.

So we walked down to the cabin which was a couple miles away. I didn't have enough wire on the airplane because it was tangled up on the tree and pulled it out. I went over and got his cabin fired up. We stayed the night.

The next day I came down and got the wiring and radio fixed up so I could call. I called down to Bethel and told them I had a problem that they had to bring another airplane over.

In the meantime I was fixing a place to fly there. We trimmed down a bunch of trees, used our snowshoes and got the snow all packed down. We had a nice place there by the third day. Finally here comes a plane in with a mechanic. We had to glue down a bunch of the fabric. Putting that glue down didn't work very well in the cold. It took a few days there and we finally got it out of there. The mechanic flew it back to Anchorage and I got the good airplane.

Jim Branson

I have been terrified, but it is hard to pick out a single incident. I can tell you about one that Smitty got me into and he also got me out of.

I was just getting a float rating. It was in June, a beautiful day. I was based in Kenai and I went up to Anchorage and got my FAA flight check for a float rating and then I had to get one from Theron before I could take the airplane home and use it.

Theron was pretty busy all the time so sometimes you had to wait quite a while before he could get around to doing something for you. About 9:00 that night, we finished the flight check. He turned me loose o.k. and I headed on back for home. We were using Longmere Lake in those days and I suspect everybody still is. It is a fairly long, narrow lake and lies north and south with trees on east/west and north side with long open muskeg on the south side.

It was a beautiful evening and while flying down there, I could see all these beautiful golden lakes underneath me. I came around, made my approach from the south, came into Longmere and got between those trees and the world turned solid black. I couldn't see anything.

Theron had drummed into me and everybody else too what you do on glassy water and what you do on whiteouts. I set it up, waiting to feel the water and hoping I felt it before I came to the north end of the lake. I did, of course, but if it hadn't been for Theron being late, I wouldn't have been landing that late and if you hadn't taught me how to get out of it, I would have really messed it up.

Ray Tremblay

Do you remember Bob Vanderpool? He had a flying service and he flew out of Red Devil, Sleetmute. I was in McGrath at the time. He was flying a Pacer and he had gone into town. He also had a trading post, a store. He bought a whole bunch of groceries and things. He was flying back and he came through the pass and was coming down the south fork of the Kuskokwim River, through Rainy Pass. The weather was way down. As most guys did, he was letting one tank run dry. He was having trouble staying visual so he's flying just on top of the treetops and the tank drains so he reaches down to the selector valve. On the Pacer it is right there by your knee. He reached down there to switch the tank and the selector value had fallen off. Now he has no gas, and so he crashes into a bunch of scrub spruce.

The next day he was picked up but now he has this airplane there and it is pretty well smashed up. They got the plane back up somehow. He got the gear back on, put a new prop on and all the ripped up fabric and everything – we're talking 40 below zero – they wet sheets down and molded them on the plane. They froze there of course and he actually flew that airplane to McGrath. He stayed very low so he didn't get any kind of an inversion.

--end of Tape #3—

--start of Tape #4—

Richard Hensel

Before I was privileged to check out with the Fish and Wildlife Service, and as a means of accumulating hours toward my private license I sometimes flew cross country flights in conjunction with regular Service work. This relates to the time I crashed the flying clubs T-craft in Karluk Lake. On a bright clear April day, the 21st in fact, the plan was for me to deliver some freight and mail to Camp Island fish encampment and chack the lakes condition that was in the later stages of breakup. The lake was essentially ice free and absolutely flat calm, like a mirror, when I arrived an hour and a half later from a Kodiak takeoff.

Having had some training in the execution of glassy water landings I aligned my straight in approach to touch down as instructed using the island shoreline to help gauge my descending height. Peering out one side window and then the other, I determined I was much too high and would overshoot that point on the island where I needed to beach. A correction was in order and valid, however I turned over the lake, rather than over the island for another go around, added some more power, and moments laterturned again, over water, to return to the island. The first turn was naturally a fatal mistake because the shoreline reference would be lost. Halfway through the second turn, my right wingtip hit the water and the nose first impact was severe enough to shear the floats from the fuselage. I was uninjured but stunned and totally dismayed as to how and why this could have happened– airborne one second, a dead stop on the next. The cockpit was filling with water at a rapid rate so I opened the door, inflated my vest and swam to the tail still projecting from the water. Meanwhile several persons on shore witnessed the incident and a skiff was promptly launched for my rescue. I remained relatively calm, hardly any shock until I was situated in the main dormitory facility at which time I started to tremble severely. The plane of course sank. I radioed Troyer to have a Kodiak Airways Goose stop by for my return to Kodiakafter convincing him over the air that the engine

wouldn't start because it was floded, really flooded. The T-craft is still to this day at rest in the bottom of Karluk Lake.

Jim King

One of the problems for me used to be flying into Lake Hood. One of the elements that we had to deal with that hasn't been mentioned is the little radios that we had in the Pacers and the Cubs. They had a reel and a wire and you had to reel this wire out and kind of tune it for length with a little dial in order to make the radio work. You had to have a different length of antennae for each frequency. Approaching Lake Hood, you had to make your first contact with the tower with the antennae out, as well as trying to figure out which way to land and watch for other traffic and kind of fit into the thing there. When you got in the traffic pattern you needed to wind the wire this thing in then you could still talk to the tower when you were in the traffic pattern.

When we first started using those things, they had a little deal that looked like a little windsock to pull the antennae out. I guess a lot of them got lost because they would catch in the water. Regularly, people would come into the Aircraft Division and pull the plane in and park it some where or other or

come up the ramp with the wire still out. (The shop stopped using those windsocks and hung a little plastic funnel on the wire bottom sideforward and this wouldn't tear loose). If I was on amphibs, I would inevitably be greeted in Anchorage by Terry Smith, all two feet of him, announcing, "your antennae is out!"

Cal Lensink

That one approach, you would come in basically following International Airport Road and then take a right turn for final into the Fish and Wildlife Cove. If you were coming out there with 65 turns out on your antennae, there was no way you were going to reel it in before you hit the water. I didn't even try!

John Sarvis

Like you guys, I landed a couple of times with the antennae out and didn't realize I hadn't put it in. It would be dragging along and someone would tell you about it and you would be all embarrassed.

One time I landed and I already knew it was out. I was trying to crank it back in and just like the fuel valve you were talking about, the handle fell off

and soon as the handle fell off, the whole thing spun off. I didn't have anyway to crank it up and I had a whole pile of wire in my lap. That time, at least I knew it.

Ray Tremblay

Remember the Gullwing Stinson had a lead ball and when you left that lead ball someplace, it was effective. I came to land at Phillips Field one time and I started out to reel this thing in and I came in right over this house. There was a guy working on the roof and I remember him looking at my airplane and I was thinking what was the matter with him. Then all of a sudden I see him jump off the roof! I guess he thought he was going to be hit in the head with that lead ball!

Bob Richey

These are some hard acts to follow, however, each one of them – I must have had my share – because each one of these gentlemen remind me of a few things.

Speaking of Lake Hood and not being safe, I was taxiing out – we had that amphib 185 – I was cleared for take off to the west, out of Spenard Lake.

Most of us are listening to what traffic is going on before we go in and we ought to be listening before we take off, right?

I was cleared to take off to the west and I was way on the east end of Spenard Lake so I was just getting up on the step, and I heard the tower say, "cleared for the east." I thought, wait a minute, and before I got to the channel, here comes this Cub around the corner headed right for me. I just chopped it and got out of the way. I hadn't hit the channel yet.

The tower said, "sorry about that." That is all he said. The rest of the summer, on that amphib, I didn't mind landing on the lake because I could see what was going on. For the rest of the summer, it shook me up so much, I always taxied to the strip on that amphib and took off for wherever I was going.

I guess all of us have, especially in the areas we were flying, ended with a few dings. Earlier you were talking about flying with loads. I had a biologist to take up to the mountains in the very early spring. We used to do a lot of landings up there. This was a particular Saturday morning. I guess I

had other things to do and I showed up and you know how these people are bringing so much gear. I had a 180 on wheel/skis.

I should have made two trips. I realized that later. I stuffed everything in and we took off. Because I had plenty on and I had a pretty good coming in, I cut it a little bit short because I didn't want to run out of the saddle and go on off down in the canyon. Everything looked good for a moment and then all of a sudden, we went through the willows and there I was. We unloaded everything, and we would first get one ski up and then the other one would cut in.

After about 6 hours, they came looking for us. I think it was Dave Spencer. He found us and I was able to talk to him and about that time, we were just about to get to the solid stuff and I did get out of there o.k. But, these types of things do happen. When I was flying the Goose – I had a lot of good mentors – I attribute some of my deafness in my right ear to my mentors.

I was with Tom Belleau. We had taken some people to King Salmon and then I was just starting to learn to fly the Goose and Tom said, "let's go over to south Naknek. There is a good cross wind over there." The wind was

blowing about 12-14 knots. I wasn't getting the nose down. He said, "put the nose down, get the nose down." I stuck the nose down and we were going along on the gravel on the nose for a moment and he said, "well, not that far down!"

We were working some lakes out there and I was lining up for a lake that I wasn't sure at that time how deep the lake was. You use to be able to tell if a lake is deep or not by what you could see on the surface. He told me to go in and land on this lake and just before we got there, it just didn't look right to me and I poured the coals to it and he said, "what did you do that for?" Well, it just didn't look good to me so we never went back to that particular lake.

Each one of you today have brought your experiences here. As far as accidents, I have been very fortunate. I have been kind of slow in pushing it. A lot of times I would have Washington folks with me and others. One thing about Washington folks, it is hard for them to unwind if they are just coming up for the first time and they want the wheels up at 8:00 and they mean 8:00. A lot of times it is hard for them to relax.

I had some people with me once and we were flying from Fort Yukon to Kaktovik. I had a woman with us from Washington and over the trip, we kind of lost her at Bethel because she had never tented before. She had never had on a pair of hip boots before and it was a pretty rough trip. We went to the Selawik River. We were between Fort Yukon going over the hills. I was probably 9,000 – 10,000 feet and she had to make a pit stop. She came forward and told me what she had to do and I said, "I'm sorry, there are no pit stops between here and Kaktovik." I told her that I had a coffee can in the back. She went to the back and found the coffee can. We landed at Kaktovik and she came up to me and she said, "what should I do with the coffee can?"

I was only in one accident. That was over at Chisik Island many years ago. I had flown in there in the Cub. I had another pilot with me. We were doing some enforcement work over there. The winds started to come up in the afternoon as they normally do and it was getting a little choppy out there and he got really worried about it and he said, "we got to get out of here, we got to go." I said, "well, o.k." He had quite a bit of float time and he wanted to fly it so I let him.

He headed out on this chop and of course after hitting three or four of those, we were put up in the air but instead of coming down and waiting until we got flying speed, I'm sitting back there realizing that the plane is not ready to fly yet. It was a really helpless feeling. I wanted to shout to him to get the nose down but I thought if I did that, he might stub it. But just sitting back there knowing what was happening was such a terribly helpless feeling.

The minute it started to fall off on that right wing, of course he stalled it out by trying to catch it, I still see today that left wing hit the water. The next thing, I still see that prop hitting that green water and over we went. What came to my mind next was I took my elbow and tried to knock out the plastic window and in my mind, I said, "you know, if I want to see another sunrise, I've got to get out of this damn thing." That is just what went through my mind.

I finally got the door open and tried to get out and I forgot that I still had my seatbelt on. I did get out and we were upside down. That green water was coming up. I finally pulled the pilot out and he kept saying, "what happened, what happened."

Some fishermen there at Chisik came over and picked us up. Later we got picked up in a Goose.

That was the only serious ding that I ever had. I have been very fortunate. I have had some wonderful mentors, going back to Theron. I ran through an awful lot of others and I picked up something from each of them. I was just really fortunate to fly all the stuff we had.

We had the Baron's which were beautiful. I remember taking a 58 up on the slope there and landing at Franklin Bluffs. We were trying to get in some VIP's. We went over to McGrath and on to Fairbanks to pick up some more people and went up to Galbrath Lake then I was to take them into Dead Horse and just before we got there, within 15 or 20 minutes, Dead Horse went down. I was flying the highway up there and there was an old strip there, probably 5,000 feet or so at Franklin Bluffs. I went in there and started to drive it and there was a helicopter coming up the road and I made contact with him and I said, "would you mind driving that strip down there and let me know if there are any serious problems with it."

He told me there was a big ditch at the north end, but otherwise, it looked pretty good. So I drug it again with a plane full of people. It was a Baron 58. OAS had leased it. We went in there with no problem. We turned around and taxiing out, sure enough, there was that big ditch. If we had hit that, we would just have wiped it out. We taxied up and parked. A pick-up truck came out and said, "what in the hell are you doing here, this strip hasn't been used for 2 years!"

They loaned us their vehicle and the VIP's were able to use it. I just stayed there with the airplane. These things do go on. I had some really good trips.

John Sarvis

There are a couple other people that we haven't heard from or talked about. Al Crane comes to mind. Does anyone have an "Al Crane" story?

Ave Thayer is another pilot that couldn't be here today.

Theron Smith

I want to talk about something and that is landing in water where you don't know the depth. One of the things you know if you practice this enough is that the water lilies, the water is deep enough when they are up on the water. You can land anywhere where there are lily pads as long as you don't run into something in the middle where it is empty. There are other plants that you can do the same thing with. This is just something to keep in mind when you run into this dilemma.

Dick Hensel

One story coming to mind about Ave Thayer concerns the time he was circling an osprey nest on the Kenai Moose Refuge when suddenly an osprey came crashing through the windshield of his Super Cub. Despite the guts, blood, blurred vision and a dramatically altered aerodynamic he managed to land safely.

Theron Smith

I want to tell another story. There were a couple of people from Washington that wanted to travel around Cordova. I was flying several other people during the summer. I had to just pick them up when I could and take care of them when I could because I had others.

I was down at Kodiak. I was there a day or so with them and I picked them up and was supposed to take them to McGrath but you couldn't get over there because the pass was closed. It was coming from the west and getting pretty heavy. I came back to Homer and landed and got something to eat and waited to decide if we could go in that evening. It was clearing up so I waited for a while longer and we decided it was going to be o.k., so I climbed out of there and I was going to climb 2,000 feet above the mountain. I was going to climb up and go on instruments.

As soon as I climbed up there, ice started forming on the airplane so I dropped another 1,000 feet and was going to be more or less clear of icing. I was continuing on and as I was getting across the water going into the mountains, there was a big roll of stuff coming over the mountains. I thought I could handle it all right and as soon as I dove into that, the airplane was just bouncing around and I was in the mountains by then and I was losing altitude. I thought if I turned around, I would be sure to hit the mountains because by the time I turned around, I would be too low so I kept on going and at this time, ice was forming on the plane again.

I was using every inch I had to keep it higher as we went over the mountains. I felt that I was still losing but I was going slowly. I had to watch the direction we were going because the thing seemed to be blowing south. I had to turn the thing about 30 degrees to keep control then I decided that I had better turn it a little bit north and get out of there and get over to a lake. I thought if I don't hit anything, I'm going to make it! That's about all you could say, really.

It was hard to get a point on Iliamna River so I moved over north and pretty soon, down I went and I couldn't see out of the windshield because it was all iced up. I saw behind that gee there was water down there so I made the lake and figured out exactly where I was. Pretty soon, the ice started to come off. My passengers didn't seem to be interested in any of this. They weren't scared! We landed there and stayed the night. Maybe they didn't know enough to be scared. That's about the closest I ever came to killing myself and everybody with me.

Ray Tremblay

I think it is about time to tell some "fess-up" stories.

When I first started flying, I was flying the Gullwing Stinson out of Fairbanks. That to me was the best airplane in the world. I really loved that airplane.

They had a wildlife conference going on in Fairbanks and all of the Canadian biologists were there, from all over. There was a concern about the caribou. We had lots of caribou and Canada didn't have their caribou. We had a few of the big caribou experts there. Ray Woolford said to me, "why don't you fly them over the Beaver Creek area and show them the calving grounds." It was the time of year when they were calving and there were just thousands of them over there. He said, "I'll send Sig Olson with you and Sig will be the biologist, he'll talk and you just be the pilot."

If you remember the Gullwing Stinson, it had a fairly high nose. There was a seat for three people in the back and then there was a pilot seat and the co-pilot seat. To get in it, you had to go through and up between the seats. They came out and the airplane was all ready to go. I got them all in and then I thought they would like to listen to the tower. I figured I might as well give them the whole nine yards.

I turned on the speakers. Back then, there were no hangars, nothing in Fairbanks. The runway was brand new. I am parked right in front of the tower. Sig, my partner, was supposed to be helping me. I relied on him, which was a mistake.

The point of this story is after I had them seated and had the engine running, ran the prop through, and I had everything ready to go. I called the tower and I said, "tower, this is N-782. I am ready to taxi to the active runway." There was this pause and finally this voice came back and it said, "782 you are cleared to taxi, suggest you untie your wing first!"

Now I have to shut the engine off, come back down, step on their feet and get out and untie – you can see by now how this is really building up confidence in your passengers. The whole trip went down from there.

One other story. Like all of you, we had people we had to fly around. We had some congressmen and others that we had to fly. We had the Grumman Goose. We had the Grumman out in front of the hangar. It was all polished up and it was just shining. I had to be in my uniform. We had those brown

uniforms. I am in the cabin taking the straps and folding them nice and neat. There were going to be some congressmen and their wives.

I've got leather shoes on and pretty soon this cavalcade of cars come up. Big limo's, etc. They start getting out of the cars in front of the airplane, I walk out of the plane, and you know the steps that hang – well as I get out, my foot slips and it slides down inside of that track. Now, I have two choices – one is to fall forward or just stay back stuck. I went forward and I am lying there with my foot hanging in the air. They are all standing there looking at me. I said, "good morning, I am your pilot!"

Dick Hensel

I you might sayf we're fessing up, Rays story reminded me of an incident one summer when the Kodiak salmon canneries began operating at full bore. The weather was bad, Kodiak Airways was having difficulty flying cannery workers out of Kodiak and started bussing Filipinos to the neighboring Anton Larson bay where the higher ceiling permitted them to land, load and transport them to outlying island canneries. Coming from Afognak in a small skiff, I arrived at the ramp area with the intention of anchoring the skiff out in deep water so it wouldn't go dry. On the road above the ramp was a bus load of waiting passengers and as I set about making preparationsI noted they were keenly observing each of my actions. The anchoring trick consisted of coiling the anchor line on the quarter deck then placing the anchor on top of the coil. A second line connected to the anchor was to be tied off above the high tide mark to later enable pulling the anchor along with the skiff to the waterline the next time the skiff was to be used. Once the second line was tied to the anchor it was a matter of giving the skiff a tremendous push until it went far enough to deeper water then next tug the second line so the anchor would slide off the bow and sink. That done it was a matter of tying off the second line which in this particular instance was lying in a pile behind me. I gave the skiff a shove , out it went at a good rate and as I was stepping backwards my foot became entangled in the second

line. The momentum of moving skiff elevated my leg forcing me to hop, then keep on hopping until I was standing in about four feet of water. As I regained my compsure I noticed to my embarrasment that the nearby spectators were all eyeballs and teeth as the bus rang with laughter.

Jim Branson

Let me tell Theron a story that I know damn well that I never told him when I was working for him. It was when I was based in Anchorage and it was during the November moose season. I had a Cub up in the valley and I was taking a look up the Buffalo Mine Road. I found a guy about a mile and a half off the road butchering a cow. Cow season was not open and there wasn't anybody close that I could call to come give me a hand.

There is a long stretch of the road there, maybe 1,000 yards long that runs pretty straight and pretty free of trees and brush. There were a bunch of cars parked there, and other hunters. I buzzed the area a couple of times and it was late in the day. They were all back at their cars. They all moved their cars down to one end of the road. I landed. I could see it was a dirt road and it looked good. I landed and when I touched down, I realized there was a glaze of ice over that dirt. It was just slicker than snot. I didn't have enough

room to get back off again so I rode it down, braking as much as I could, came to the first corner and slowed almost to a stop but I picked up a little tree on the outboard side with the wing tip. I swung out over it and when it come to a halt, I visualized myself riding that seat all the way down to the bottom of the cliff with the airplane strung up behind me.

When the airplane came to a stop, the nose was sitting on a little clump of brush and the main gear was just swinging. The tail wheel was on the road. I couldn't get out of the airplane. I was afraid to move, it was just that shaky.

A bunch of these hunters came running down the road expecting to pick up a battered body. They helped me ease the plane back far enough for me to get out. We got it back up on the road and I parked on the far side. All it had done was scratch the cowling a little bit. I hoped you wouldn't notice that, Theron when I brought it home.

I went out and got the guy. He turned out to be a 17-year-old kid. I then took off and headed for home. Theron, I never told you that story until right now, here today.

Theron Smith

I imagine there are a number of stories around that were never told to me!

Jim Branson

Remember the Japanese herring fleet up in Norton Sound? We caught two of them. In fact Smitty probably arrested the only foreign fishing vessel that has ever been done with a Grumman Goose. Not an easy thing to do.

This is when I was working out of Kodiak for the National Marine Fisheries Service. We had gotten reports from Nome of a bunch of Japanese ships showing up in Norton Sound. Normally, this was a Coast Guard matter. All the Coast Guard airplanes were tied up so I couldn't talk anybody into taking me up there to take a look so I called Theron. He agreed to go out there with a Goose with us. I flew to Anchorage. We had Virgil Crosby with us. We flew over to Norton Sound and two Japanese herring fleets had moved in there. There were two factory ships and something like 25 gill netters attached to each of the factory ships. The nearest Coast Guard Cutter was 3-1/2 days away in the Gulf.

We stayed in Nome and about twice a day, we would fly by trying to look very commercial. We were high, just checking on where they were. When the vessel finally got within range where we could make a run on them, we agreed to rendezvous with them on the south entrance of Norton Sound.

The deal was, you had to find one of these people fishing and then keep them in sight until you managed to make the arrest. We went down there and met the *Storis*. There were boats fishing everywhere. We picked out one and kind of gave it to the *Storis* to follow. All the other ships cut their boats and fled. We then came around and found one outfit still asleep. These guys had put their gear out and had all gone to bed. They didn't try to move anything. They just stayed there.

Smitty landed and taxied in circles around this guy. Pretty soon one of them came up on deck, rubbing his eyes. He looks out at the Goose and all of a sudden this place was just full of running Japanese before you knew it. Every time they would get up toward the anchor we would wave them back and try and look as mean as we could. In about an hour, the *Storis* showed up and arrested that one also. That's the only foreign capture we ever did with an airplane. Theron was in command.

Terry Smith

This was a big story at the time. It was written up in the paper as "The Shot Heard Round the World."

Ray Tremblay

I must tell you about the most hair-raising story that I can relate to flying and it actually happened to one of our Fish and Wildlife pilots. He was a commercial pilot and instrument rated and an instructor. He lived in Kenai but was in Anchorage. He had come to Anchorage on an errand. He had borrowed one of his student's airplanes, a Cessna 140.

When he got ready to go in the morning, we had our typical fog, about 500 feet high, just in the Anchorage bowl. This aircraft was not equipped for IFR flying. The weather was obscured, one-quarter mile fog and freezing precip, but Kenai was clear. He filed an instrument flight plan with that Cessna 140 figuring there would be no problem to climb 500 feet up, get on top and go to Kenai where it was clear. Remember this.

He got cleared to runway six left and as he was going out there trying to find the runway, he got disoriented. He ended up on the high-speed turn off that

approaches six right and the blast from a departing 747 blew out the windshield and the side window of this 140. He almost collided with the 747. It bent the tail wheel, tore the wings and the fabric. He was found out there by security, running from this airplane. He left the airplane and was trying to run back to the terminal.

They went out and got the airplane and they pulled it in and it had 3/8 inches of ice on the leading edge of the prop. He actually saved his life by not being able to take off.

The interesting thing when we interviewed him was, he had no idea that if there was ice on the prop he wouldn't be able to take off. This was an instructor! In his interview he said he felt he was capable to climb to the top of the overcast with the instruments in the airplane. He had not considered icing on climb out and he had no idea that the prop would ice up while taxing.

Bob Richey

A lot of people do not realize how easy a prop can ice up. Before we made gear changes from floats to wheels, we use to have a plane there at Hakala's place on Sport Lake. We would wait till you got plenty of ice in Anchorage. Many times we had to break ice to get out of Sport Lake. What I used to do, I would warm the old girl up facing into the bank. The guy across the lake there, one day, decided that he would go ahead and check his mags, taxiing around the lake. I told him it was picking up ice that he didn't even know about. He tried to take off about three times. He just couldn't get it on the step. People don't realize how easy you can pick it up. One of the AOPA magazines talked about a couple of fellows in Washington State who were going to go golfing out on one of the islands outside of Seattle. They taxied the Bonanza down on a really moist area and had the same problem. They picked up ice they didn't realize. Under the right conditions, you can sure pick it up.

Theron Smith

We had icing boots on the Goose. They worked quite well.

Unidentified speaker with a question:

This winter we were doing our moose surveys out near Galena and we were using a Cub. We noticed some frost on the tires while we were watching for moose. We started looking around and it was getting on the struts. We thought this to be interesting. We kept on going and after about 45 minutes it was everywhere except for on the windshields. We found ice on all the struts, tires, the undersides of the wings, the leading edge of the wings, top of the wings. It was like the airplane had been parked out overnight. It was like hoarfrost. I can't understand how or why this happened. Has anyone ever seen anything like this? This actually happened twice; once over on an island on the Yukon, and once over on an island up by Huslia. Both days were clear days with unlimited visibility. Sometimes if you would look up at the sun you could see crystals. It was about 10 below zero.

Ray Tremblay

Oh, yes. You can build up ice anywhere. Whatever level the freezing level is that's where it's going to freeze. Sounds as though there was a lot of moisture in the air.

Theron Smith

Depending on the amount of moisture in the air it will make a difference too. You could get real thick ice.

--end of Tape #4—

--start of Tape #5—

Cal Lensink

When we were looking at new refuge areas, we had been flying quite a while and we were over the Innoko area. We finally decided we needed a pit stop so I found a nice place to land on the Innoko River. I warned all aboard that the bank was very muddy and there were lots of mosquitoes in the area. I told them that before they got out of the plane they should pull up their boots and put on some insect dope. They didn't pay any attention to me. I pulled into the bank, all of them bailed out, jumped into the soft mud and they all promptly fell down without insect dope on. Here the mosquitoes hit them and they had no choice but to take their dirty, muddy hands and rub the insect dope all over their face. They looked like a bunch of Indians.

Jim King

Bruce, I think you should tell about when your oldest daughter was born.

Bruce Conant

My oldest daughter is now 21. We went to Cordova to catch swans. We had Dr. Bill Sladen with us. He was going to take some swans over to the Moscow Zoo. My wife was due in a couple of weeks for the baby. We had been taking these classes and I was supposed to be there to help her have this baby. She assured me that the baby was not going to be born and that I could go out and catch swans. So we did.

We went out and got the airplane high and dry on a sand bar – that's another story – we got the airplane loose, got the swans and got them back to Cordova that night. We were going to go to Juneau the next day with the swans in a standard Beaver. About 6:00 in the morning, I get this shove on my shoulder. Garvin Bucaria was the Forest Service biologist there and he said, "Bruce, Bruce, your wife is having a baby!" I was a bit groggy but figured out what was going on.

We tried to get me on Alaska Airlines to return to Juneau. It was booked but I could get on the wait list. The plane was due to leave around noon. As noon approached, we figured I wasn't going to get on the airplane so we decided to take off with 728 for Juneau with the swans in the back.

It was pretty good weather, although the weather in Juneau was a little "iffy." When we got to Yakutat we landed and took on a little more fuel. It looked like it might be a little crummy around Cape Spencer which it quite often is. That is a rough spot there for weather. We decided to go the back route up the Alsek River, over Haines, over the pass and down. That worked fine.

We were going along and Jim was flying. He had it up about 2,000 feet or so as we were thinking about getting over the pass. Bill Sladen, for those of you who know him, he has a one-track mind when it comes to birds, especially swans. He had his binoculars out and he spotted a couple of white specks down there on the Alsek River. He says, "I see a couple of swans down there, I don't suppose we could go down there and take a look could we?" Jim just looked straight ahead and I kept looking straight ahead and we just kept driving along.

We got over the pass and the weather in Juneau was coming down like real bad – fog and less than a mile visibility. You could see the ceiling coming down, down, down and just north of Berner's Bay, the fog met the water so we just landed. Jim kept it on the step and we taxied into Berner's Bay. We called on the radio and got in touch with Jim's wife, Mary Lou, and told her we were going to try to get to the end of the road if someone could come out and pick us up. We pulled into Echo Cove there, put the gear down and taxied up on the beach and parked the airplane.

Jack (Hodges) drove the van out. We got the airplane parked nice and everything shut off and Jack pulls up. We load the swans and all of us in the van and take off for the hospital. I arrived 2-1/2 or 3 hours too late for the arrival but there was a nice brand new baby! Her name is Tamara Lynn Conant because we landed in Lynn Canal.

John Sarvis

I will tell you about some of my first flying when I got to Alaska and piloted, I was doing some full time _____ at that point and was studying for my private pilot written. We had been surveying up on the Innoko. I'm flying along and happy as a clam and pretty soon, Jim goes to sleep. I was following the VFR and getting a lower and lower ceiling. Finally around 1,000 or lower and just following the VFR right for Bethel. He said, "well, how do you know how far away we are from Bethel?" Oh, I said, "I hadn't thought about that!"

(--break in transcription--)

Bruce Conant

--there is a fork in the river up there and you got to go one way or the other up there. Jim was real tired. It had been a long day and we didn't want to wake him up and then he prefaced this by saying, "you know, sometimes, it's hard to tell –(Jim gives you this impression that he's not exactly sure what's going on sometimes)—he says, I'm pretty sure it's up this valley here, I'll just sort of ease it over. He starts to ease it over and Jim wakes up and he takes one look and he says, "that one."

The punch line is, Jim may not always appear to know exactly where he is going but he does always know exactly where he is going!

Terry Smith

I think it was the very first trip I flew for Fish and Wildlife, where you(?) and I brought the turbine Goose back with the congressional delegation. You were retired and I went to work the next morning, basically. I was headed over to Olsen Bay to pick up Jack Kelly and Howard Sears. They were closing up the camp at Olsen Bay.

I went by there the other day, in fact, and the roof has all fallen in. The Bay is just as pretty as ever but when you turn over and you are looking for this pristine camp of years past, the buildings are still there but the roofs are falling in and the pad that we used for 20 years on the beach out there, there is nothing but a pink area on the stones. It is just completely disintegrated.

They were supposed to be picked up at 2:00. There is probably enough knowledge here to substantiate that Dad wasn't always right on time at 2:00 (sometimes not even the same day) – that sometimes served us well.

Actually on that congressional delegation flight, they had been up and antsy to go and we were going to land behind the boat outside of Ketchikan and then work our way on to Juneau. If we had gotten started at 8:00, it would have been an ugly, ugly day with the fog and the rain.

We got going late on purpose, because of the weather, about 10:00-11:00 o'clock. By then the sky had cleared and we were on our way. Having been born and raised in Alaska, Dad was never real early to rise in the morning because the weather was usually bad.

At any rate, my first day on the job, I came storming over the top of the lab at Olsen Bay and parked the thing on the pad out at Olsen Bay as I had been doing for several years and riding for 15-20 years. The people were not happy. They came storming around the corner in the skiff and they were not amused. They said, "what in the hell are you doing here?" I said, "well, it is 2:00 o'clock." They said, "yes, and we were to be ready at 6:00 o'clock to get out of here; we have our day planned to close up the camp and everything." I said, "but it is 2:00 o'clock." Jack said, "yea, but that means 6:00 o'clock!" I waited there for 3-4 hours while we went back and closed up the camp and got everything squared away. One of them headed out in

the boat to Cordova and we followed him over with the Goose. They had their own program based on "Theron time."

Jim King

When I was flying 750 which was the cranky amphib with the funny floats, one of the remedies for these leaky floats - there didn't seem to be any way to patch them. Somebody had thought that if they were filled with Styrofoam that would prevent the water from coming in. Actually, there was quite a bit of space around this Styrofoam and what it did was make it hard to get what water that was in there, out.

It was about the 20th of December one year and Howard Sears, who was a pretty large man, needed to do some bug sampling at Little Port Walter, which was a fisheries station. He needed to dig some gravel in the morning and then again in the evening. We were to stay overnight. He said to me, "you can go get a deer while I dig this gravel." That sounded pretty good.

We went off down there, landed in the salt water and tied the airplane up at the little dock there. He went out and got his bugs and I went out and sure enough, I got a deer. I brought it back and we had a nice evening there. The

next morning it was cold. I went out to get the water out of the floats that I knew that was in there. Not only had the water soaked up around the Styrofoam but it was frozen above the waterline. The airplane was getting lower and lower in the water. Later that day after being cold, this wet snow started coming down and it snowed wet snow for the next two days. The airplane was none too high to start with. I spent most of two days sweeping the snow off the wings so it wouldn't sink at the dock.

In the meantime, Howard went out and got a deer. It was Christmas Eve and it cleared up a little. It seemed like it was worth a try to get out of there. I got what water I could out of the floats and we left what gear we could behind. We taxied out through pretty big waves from Little Port Walter into Big Port Walter around the corner. The Watchman there at Little Port for the Marine Fisheries, came with us with his skiff because he wasn't sure we were going to make it around there without sinking, but we got around and got into Big Port Walter. I think my take off run was about 2-3 miles. I used all of Big Port Walter and finally got in the air and got up the way a little and the weather got better. We did get home for Christmas. I didn't volunteer to take Howard on any more trips.

We had this biologist from "Outside." He wanted to do the spring duck surveys with me. He had made arrangements through the Washington Office to do this trip. I didn't have a whole lot of choice in this but he did contact me and wanted to know what he could bring. I said, "well, we are going on a long 3-week trip and we had a lot of gear to carry in the Beaver." I told him he could bring 50 pounds. I figured he ought to be able to live on that for 3 weeks.

When he showed up in Anchorage, I think he thought I was going to weigh his bag because he kept emphasizing that he had weighed it and it was only 50 pounds but then I saw him getting ready to get in the airplane. He had this hunting coat with a game pocket in it and he was having a hard time carrying his coat. I think he had another 100 pounds in his coat!

Terry Smith

I dropped a group off at Walker Lake. I was going over to Bettles to get some gas and then go back and stay with them. It was in the early 70's and the rip stop nylon had just shown up. I think this group had raided REI, North Face, or somewhere. They had enough down stuff to half fill this room. We put it all out there and I was planning to go straight ahead and come off the beach, basically at a 45. Sure enough, the right tire caught just almost at the time you get the inertia going and the right tire catches and it turns right into this pile of stuff and one big blast and a little wriggle and it's free. Then I made one turn around to get ready to go. About half way to Rocky River, the down stuff is scattered clear up to the top of that ridge. There are coats, vests, and stuff scattered everywhere. You begin to wonder if you should even return to the scene.

Theron Smith

In the fall, this guy would go all over Alaska and get a little bit of fish and send them down to see what pesticides might be in them. We would go all over the state using a Goose or some other airplane. This time we wound up over the mountains and out to the flat country where we used to land at Umiat. There was no one in there at that time. He took all his fish out of the airplane and put them up on the building. We found a building there that was pretty decent and we had some heat and beds. The next morning, he came out to check his fish and a big ole bear had come in there and had eaten all his fish on top of the building where he had placed them. He had to start all over again. The bear was probably there the next year, waiting for the airplane!

Terry Smith

I am trying to think of the field biologist that lived on the little island off Montague. We used to drop him at Cheney Lake. He was a fanatic from Finland or Norway. He was a tough, young guy to get along with. Dad and I went over to pick him up one evening at the end of his program. We had been in and out numerous times during the summer. We jumped in the Goose and headed over to pick him up.

That was the whole drill for the day. We were absolutely on time. It was mid afternoon and we had just gone through Portage Pass and over into the Sound and not a bad day in the Sound. The wind was wrong to land on the beach so we landed in Cheney Lake and parked there at the cabin. There was nobody at the cabin, nothing going on.

This is how kind of a simple deal turns into an interesting thing. Nobody showed so we took off and went around the island and here the guy is waving. So we come back in to land and he doesn't come and he doesn't come. As it turns out, he was watching something there and he wanted us to get out of the way.

Pretty soon, just before dark, he comes back across and he is no more ready to go than a man on the moon. Finally, we get the plane loaded up and get to the cabin. We go out of Cheney Lake and just about dark and we get up against Whittier and by now it is raining and what we went through isn't there now. The lights of Whittier were gone from the low ceiling. You usually can make a few turns there and you can see the light on Portage Glacier.

We knew this was not going to work. We could not see anything up the creek at Portage Pass. We made a few turns around town and by now it is just pitch black dark. Dad sets up to make real pretty operation to land at Whittier. He's got one real bright light there at the port. He lines up and fell off the step fairly close to the dock and it was then, "now what" sort of thing. We taxied back and forth in front of the dock just once and thought about putting it in the boat harbor but that didn't seem like a very good idea because, now it would be all night. So he turned around and taxied back by the dock and now there are flares on the dock. Somebody had done a really nice thing but they were really not going to help. The decision was made that the Whittier strip might work out fairly well.

We started taxiing down there in the dark, kind of feeling our way along. We get down to the strip and as we are taxiing down there, there is a vehicle driving out toward the airport. This looked like a very fortuitous thing because it is a long walk from the airport to town and it is just pouring down rain. The vehicle is going right out to the strip and we thought this was really going to work out. As we get closer and closer, the vehicle comes streaking down the airport.

That was great because that was a pretty dark end of the Bay and this is now going to make this easy. They just basically had a lit ramp out on the water. Out we come just like we knew what we were doing and the length of the runway and right back to the parking area and turn around. The guy pulls up and he is just a pleasant person. He has a white Suburban and has room for all of us and we would just go spend the night in Whittier.

We pile in the vehicle and the night is just beginning. We head back down the road and as we are going down the road, here comes a car coming the other way, flashing his lights. We come to a stop. This guy was obviously well known by everybody in town and well liked. He is seeking help because the dock is on fire! The flares had set the creosote on fire on the dock.

Now we got the dock on fire but there are four more people in town to fight the fire. That's us. We arrive on the scene and it's the absolute best example of a Chinese fire drill you've ever seen. What they had done over the years was the railroad and the port had all purchased 2-1/2 inch fire hoses. The only problem is, the fittings can be either course or fine and they can be either plated or bare. The plated ones won't go in the bare ones.

What happened was there must be 200 sections in Whittier and everybody in town had two pieces of hose that wouldn't go together.

They had the fire hose out of the big warehouse and it was strung out the door and there is a guy buried back in there. It seems like on a relatively regular basis, that he would decide that we must have it together by now and he would turn on the faucet.

This went on for about 2-3 hours. We were intensely interested. After our interest waned, we went up to the tavern up on the hill in the old government building. People started to filter in. Everybody was just soaking wet. We watched the fire just slowly die because the rain was just pouring down enough that the fire just went out, absolutely with none of our help because I don't think we ever got the hose beyond the warehouse stage.

The next morning, the weather was quite nice and we took off and went the last 50 miles home.

Dad has been in a lot of dramatic places but the year that we supported the Bureau of Reclamation on the Susitna River, Devil's Canyon, is one to tell about. There were multiple trips a day at times supporting a fairly large

Reclamation Corp sampling operation for the proposed dam. We tried to make it up the Matanuska pretty hard that night but turned around and came back down. We were making every bend in the river and couldn't cut it down river toward Palmer. That area is where Dad grew up – Wolverine Creek, Lazy Mountain, the Palmer area.

We turned back around and there is a pretty crummy piece of real estate there right below King Mountain. The river is in a notch and the road doesn't have many straight stretches in it. Now it was getting dark and a decision had to be made. We landed on the gravel bar below the King Mountain Lodge. The guy in the Lodge said there had never been anything except a Cub on that bar before. People were stopping on the road, stopping for gas or whatever and he would go out and bring them around to the front side of the lodge and have them look down at that great big airplane setting on that little gravel bar.

John Sarvis

Well, I think it is about time to close up here. Thank you guys for coming out.

--end of Tape #5—

Transcription of tapes completed.